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MESOAMERICA

CONSTRUCTING POWER & PLACE IN MESOAMERICA

PRE-HISPANIC PAINTINGS FROM THREE REGIONS



EDITED BY

Merideth Paxton & Leticia Staines Cicero



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In memory of Paul Kirchhoff, George Kubler, and Manuel Toussaint, major builders of the foundations that have allowed this book to be written.	

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Preface



Identities of power and place, as expressed in indigenous paintings from the periods before and after the Spanish conquest of Mesoamerica, form the essence of this book. These sophisticated and skillfully rendered images occur with architecture, in manuscripts, on ceramics, and on large pieces of cloth. Even human bodies were painted. As is discussed more fully in chapter 1, the investigations that follow are structured chronologically within each of three cultural subregions: Central Mexico, Oaxaca, and the Maya area. The contributors draw conclusions regarding places of settlement within landscape and natural environment and the ways groups within communities establish unities. Further, the contributors present information on the propagandistic manipulation of history to assert political power and to defend weak populations. The visual characteristics of a community's historical record can support assertions of its status as well, and the simple act of writing the names of leaders can immortalize their power. The chapters additionally show the importance of origin myths to settlement foundation and to current interpretations of pre-Hispanic historical documents. Animal motifs on pottery are another means of

demonstrating status and providing a sense of place. Social activities relied on corn as an important food for reinforcing the status of high-ranking participants, and cosmetics further helped communicate their power. Finally, some of the contributors study religious motifs as indications of shifting preconquest political affiliations and as a means of preserving cultural memory during the Colonial period.

Although the presentations pertain to visual sources and to some extent follow art historical methods, they also reflect training in archaeology, history, and biology, and they consider language and the latest advancements in epigraphy. Results derived from archaeometric analysis, a recently developed field, have proved helpful as well. Astronomical concepts have figured in some of the studies, as have ethnohistorical and ethnographic reports. Thus, the volume is multidisciplinary. The authors have been educated in several countries of Europe and Latin America, as well as in the United States, and as many of the researchers normally publish outside this country, it is a pleasure to bring their contributions to an English-speaking readership. Merideth Paxton is responsible for the final translations.

Acknowledgments



In addition to the scholars to whom this book is dedicated, we are pleased to acknowledge a tremendous debt of intellectual gratitude to many others who have directly and indirectly influenced the development of the studies presented here. It is only to avoid inadvertent omissions that we do not name them individually. We also wish to emphasize our appreciation of the universities, other research institutions, professional societies, and funding agencies, identified in the biographical statements, that have supported our investigations. We would further reiterate the gratitude expressed separately by the contributors to those who have generously authorized reproductions of images found here. The rapidity with which these approvals have been granted has been highly beneficial.

We thank the reviewers, Anne Walke Cassidy and Maline Werness-Rude, for their comments, which have resulted in important improvements to the manuscript. Furthermore, the contributing authors have persevered admirably, despite unavoidable delays, to produce the final versions of their chapters.

The members of the University of New Mexico Press have helped shape the volume in indispensable ways, and we are indeed pleased to have benefited from their contributions. In particular we thank John W. Byram, director; W. Clark Whitehorn, executive editor of acquisitions; Elizabeth Hadas, director emerita of the University of New Mexico Press; and the people on the editorial board for enthusiastically supporting our book from its inception. James Ayers, managing editor, has guided its preparation for printing. During that phase, we have had the advantage of superb copy editing by Sarah Soliz. Catherine Leonardo, senior book designer, has given the volume its visual form, including the splendid cover. Morgan Podraza, publishing assistant, has helped with the project as well. The marketing and distribution relies on the highly capable efforts of Katherine White, marketing and sales manager; Lauren Consuelo Tussing, publicity manager; and Richard Schuetz, associate director for business operations. Surely we additionally gain from the work of others at UNM Press whose efforts are unknown to us; we sincerely appreciate all of the people there who maintain the tradition of excellence that began in 1929.

On a personal note, Merideth Paxton would like to thank her husband, Alan Paxton, for his unwavering support and companionship during the extended, very enjoyable journey that has included this project.

Chapter One

Constructing Power and Place in Mesoamerica

AN INTRODUCTION

Merideth Paxton and Leticia Staines Cicero



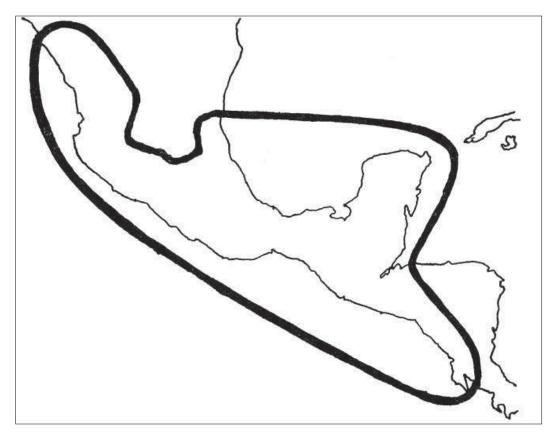
n extensive range of painted sources supported pre-Hispanic Mesoamerican projections of power over a broad area and a long period of time, as the studies in this volume demonstrate. The investigations follow a standard approach in that they are organized chronologically within each of three main geographic divisions. While this scheme is routine, it also reflects the fundamental development of the relatively new field of Mesoamerican studies. This cultural and geographic entity came to be formally defined as separate from North America and South America only after the twentieth century was well in progress. The concept emerged from pioneering explorations that had previously cataloged cultural remains and had begun to build chronological sequences. This groundwork initiated an understanding of how individual sites and their surrounding settlements changed over time and interacted with distant polities. The theoretical notion of Mesoamerica has served as a starting point for many discussions, and information generated by research continues to bring further refinements of its meaning.

The scholars who initially established the boundaries of Mesoamerica predominantly represented the discipline of anthropology. A later section of this chapter reviews the addition of art historical contributions in Mexico during the 1920s, through the efforts of Manuel Toussaint. In the United States, analyses of the preconquest Mesoamerican cultures by art historians began

more slowly, during the last half of the twentieth century. Experts in other fields have now devoted careers to Mesoamerican topics in increasing numbers, as the composition of this volume reflects. With insights that are outlined more fully in what follows, the scholarly views presented here rely on information provided from archaeology, art history, astronomy, ethnography, ethnohistory, history, language analysis, and natural science. This scholarship also represents Europe and Latin America, as well as the United States. Current research has further benefited from new technologies, and several chapters incorporate such advances. Surely this wide enthusiasm for Mesoamerican studies must be due in part to the aesthetic appeal of the indigenous images painted on architecture, in codices, on large pieces of cloth, on ceramics, and even on human bodies.1

MESOAMERICA DEFINED

The concept of Mesoamerica did not enter professional discussions until 1943. Although archaeological excavations had certainly been conducted within its various subareas long before that, distinctions were made primarily to identify the geographic locations where the work was being done. Such was the case when the Department of Middle American Research (now known as the Middle American Research Institute) was created



Map 1.1. The limits of mid-sixteenth-century Mesoamerica, as defined by Kirchhoff (1943). From Kirchhoff 1960, 5.

at Tulane University in 1924.² It was Paul Kirchhoff who published in 1943 the list of cultural traits that unified the Mesoamerican entity, separate from North America and South America. He envisioned the unit as it occurred at the time of the Spanish conquest, with a northern frontier that ran more or less from the Río Pánuco to the Sinaloa River, passing through the Lerma River (map 1.1). His southern border extended roughly from the mouth of the Motagua River to the Gulf of Nicoya, intersecting Lake Nicaragua. Kirchhoff regarded his comments as preliminary, as requiring further refinement because of such factors as the likelihood of boundary fluctuations during the pre-Columbian period.

Kirchhoff (1952, 27, 1960, 11) thought of the mid-sixteenth-century inhabitants of Mesoamerica as a "superarea of superior cultivators," which he contrasted with "inferior cultivators." The exact connotations of the two terms remain open to inference because neither was explained in detail.³ His region coincided with the presences of five linguistic groups and characteristics that he thought of as exclusively or at least typically Mesoamerican. These included the cultivation of certain plants with a digging stick (coa): the lime-leaved sage

(chía), used as a beverage and to provide luster for paints; cacao; and the century plant (maguey), valued for its juice (aguamiel), beer (pulque), and fiber for clothing and paper. Another agricultural marker was the grinding of corn after softening with ashes or lime. Also significant were certain items of clothing and three distinctive architectural elements: stepped pyramids, stucco floors, and ball courts with rings. He noted the importance of hieroglyphic writing, numbers whose values depended on their positions, the creation of books with accordionfolded pages, and the existence of historical annals and maps. Kirchhoff additionally mentioned the 365-day calendar cycle (eighteen months of twenty days, plus a fiveday period) and the 260-day cycle (thirteen numerals combined with twenty day signs), some specific divinities, and ritual sacrifices. The list further incorporated markets with specialized products, merchants who also served as spies, and wars fought to gain sacrificial victims (Kirchhoff 1952, 23-25, 1960, 7-9). It is worth emphasizing that this characterization looks backward in history from the time of Spanish contact; in its original definition and in current common usage, the concept of Mesoamerica pertains to the pre-Columbian period.

The Kirchhoff definition proved to be highly significant, even in preliminary form. It provided the impetus for a seminar, sponsored by the Wenner-Gren Foundation for Anthropological Research, which was held in New York City in 1949 (August 28-September 3). Kirchhoff attended the meeting, where presentations formulated in reaction to his 1943 publication were made by ethnologists from the United States and Mexico. Further comments were given by highly qualified discussants of the caliber of Mexican scholar Wigberto Jiménez Moreno. This group effort produced yet more developments, including a generalized map of language distributions (without bounded subareas; Tax 1952, 11-13; Johnston 1952, 304-5). Kirchhoff's definition of Mesoamerica has subsequently served as the foundation for numerous influential sources used to train future researchers. Among these is *An Introduction to American Archaeology*: Volume 1, North and Middle America, which has a slightly revised version of the earlier map (Willey 1966, fig. 3-6). Similarly, The Aztecs, Maya, and Their Predecessors: Archaeology of Mesoamerica reproduces the original map, with added details, and enumerates the most important traits from Kirchhoff's list (Porter Weaver 1981, 10-12, including map 1).

Modifications to the Kirchhoff scheme have continued, and reevaluations of its overall utility have been published. As Creamer's (1987, 37) review of the history of subsequent investigations has summarized, one practical difficulty in its application is that a number of the characteristics are, due to their intangible or perishable nature, not recognizable in the archaeological record. In apparent response to the problem, Gordon Willey, Gordon Ekholm, and René Millon (1964) crafted a set of shared cultural features that are both pre-Hispanic and more easily identifiable in excavations. Key among these are sedentary communities and reliance on agriculture for subsistence. These authors retained some of Kirchhoff's defining aspects and added other characteristics, such as technologies, agricultural techniques, more complex architectural elements, and settlement patterns. Willey, Ekholm, and Millon further delineated ten geographic divisions of Mesoamerica (map 1.2). They supplemented this work with outlines of the succession of pre-Hispanic chronological periods and a summary of general trends that occurred within the framework. Their study appeared as a chapter in the first volume of the Handbook of Middle American Indians, which dealt with the natural environment and early cultures of the region. Accompanying research describes such aspects as the

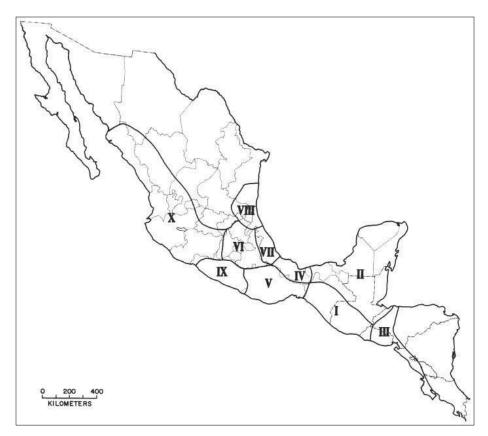
weather and climate, natural regions, soil types, flora, and fauna. As part of the encyclopedic *Handbook* series on Mesoamerica, the contribution continues to be widely consulted.

Besides the difficulty in establishing the existence of some of the items listed by Kirchhoff, Creamer (1987, 37) pointed out that the distributions of some of his traits for defining the boundaries were not as limited as he had thought. This understanding had naturally resulted from the gradual accumulation of greater specific knowledge, which had led to modifications, like those proposed by Willey, Ekholm, and Millon, to the original concept of Mesoamerica. Creamer further observed that the concept of Mesoamerica as a cultural area has been challenged as archaeological investigations have increasingly become problem oriented, emphasizing theoretical issues.⁴ The availability of more facts concerning individual locations has also brought awareness of the importance of differences within the broad Mesoamerican region and the creation of models to explain various developments. One of these is the interaction sphere, which focuses on connections among groups that are otherwise dissimilar. This approach might, for example, help build an understanding of the appearance of exotic trade goods, such as jade objects with Olmec features, in places as disparate as Mexico and Costa Rica. However, despite emerging attentiveness to the divergences that existed within the boundaries of Kirchhoff's Mesoamerica, Creamer (1987, 41, 45-46, 53-54) did not advocate abandonment of the term.

Recent research does, in fact, follow divisions of Mesoamerica that are similar to the ten proposed by Willey, Ekholm, and Millon in 1964. A map of language distributions at around AD 1500 has been compiled by J. Kathryn Joserand and Nicholas A. Hopkins (map 1.3). And the contributions to *The Oxford Encyclopedia of Mesoamerican Cultures* are systematized according to eleven zones that retain some of the Willey, Ekholm, and Millon units while combining or dividing others (Carrasco 2001, 213; Sugiura Yamamoto 2001). Both publications identify Central Mexico, Oaxaca, and the Maya Highlands, but the *Oxford Encyclopedia* separates the Maya Lowlands into northern and southern sections.

EARLY RESEARCH PERSPECTIVES

Notwithstanding the studies of the natural environment in the first volume of the *Handbook of Middle American Indians* and other similar investigations

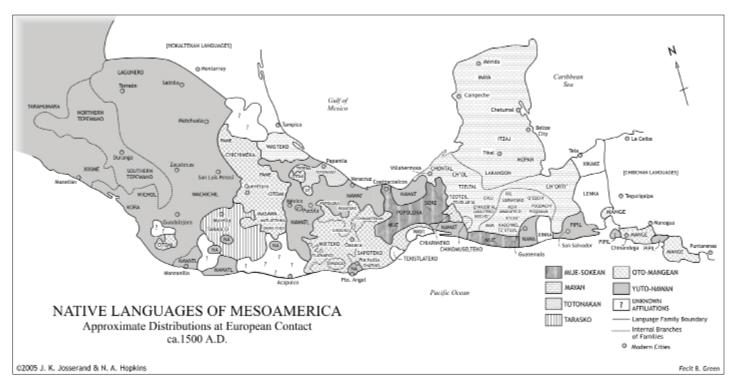


Map 1.2. Mesoamerica, with ten regional divisions: I, Maya Highlands; II, Maya Lowlands; III, Southern Periphery; IV, Southern Veracruz–Tabasco; V, Oaxaca; VI, Central Mexico; VII, Central Veracruz; VIII, Huasteca; IX, Guerrero; X, Western Mexico and the Northern Frontier. From Willey, Ekholm, and Millon 1964, 461. © 1964, renewed 1993. Used by permission of the University of Texas Press.

published separately, the aforementioned scholarly inquiries are essentially anthropological in outlook. The addition of art historical investigations to the field of Mesoamerican studies dates from the twentieth century, due in large part to the seminal efforts of the Mexican scholar Manuel Toussaint. After living in Spain, he returned to his own country in the early 1920s and realized that the quality of the art and architecture created there during the colonial era was comparable to examples he had seen in Europe. At a time when Mexican colonial culture was not valued, Toussaint traveled under difficult conditions to study and catalog these monuments. His work resulted in an impressive list of publications, including Arte colonial en México ([1948] 1967). It was while he was making the supporting surveys that he understood the significance of indigenous elements in the creation of an aesthetic perspective that was distinctly Mexican, not merely an inferior imitation of European models (Weismann 1967).

Additional support for the nascent study of Mesoamerican art history came with the formation of the Instituto de Investigaciones Estéticas in 1936; Manuel Toussaint served as its founding director.⁵ Probably influenced by the perceptions he gained during his examinations of colonial paintings, sculptures, and architecture, he also wrote the first article in the first volume of the Anales del Instituto de Investigaciones Estéticas. Appearing in 1937, this was a study entitled "La relación de Michoacán, su importancia artística." Salvador Toscano's Arte precolombino de México y de la América Central was also published by the institute in 1944. These efforts are significant in part because they recognized the subjects of their discussions as works of art and because they were not formulated in terms of European art historical studies.6

The separation of Mesoamerican art from European styles and analytical precedents was not uniformly followed. One such case is José Pijoan's (1946, 313–14)



Map 1.3. The native languages of Mesoamerica: approximate distributions at European contact, ca. AD 1500. Compiled by J. Kathryn Josserand and Nicholas A. Hopkins. Used by permission of Nicholas Hopkins.

interpretation of the carved scene on Lintel 25 from Yaxchilán, which he wrote at a time when the decipherment of Maya hieroglyphs had not advanced beyond the reading of Initial Series dates.⁷ The lintel depicts a fantastic, highly ornamented snakelike creature that rises above a shallow container. The mouth of the saurian is opened widely, revealing the emerging head and torso of a man who points a spear toward a kneeling female figure. Having previously written a three-volume history of world art, the author had a background that encouraged him to make a comparison with an Italian Baroque sculpture (Pijoan 1933, 1946, figs. 492 and 493). Gian Lorenzo Bernini's The Ecstasy of Saint Teresa (1645-1652) is similarly composed, with an angel who aims a spear at Saint Teresa. According to the account recorded by the mystic saint, the imagery refers to the moment when an angel thrust a golden spear into her heart, leaving her "all on fire with a great love of God" (quoted in Martin 1977, 103). Thus, Pijoan understood the meaning of Lintel 25 and others like it at Yaxchilán as a vision of a serpent deity rising from the smoke of hallucinogenic offerings burned in shallow dishes by devout women.

While Pijoan's comparison of this group of Yaxchilán lintels with *The Ecstasy of Saint Teresa* is problematic

because it is grounded in coincidence, a similar explanation that includes consideration of the hieroglyphic texts has been independently developed. Linda Schele and Mary Ellen Miller (1986, 176-78, 187-88) propose that Lintel 25 and Lintels 24 and 26, from adjacent doorways of Structure 23, illustrate a series of sacrificial bloodletting events. The protagonists are the ruler Shield Jaguar and his principal wife, Lady Xoc. Schele and Miller regard the Lintel 25 scene as a depiction of the Vision Serpent, which was produced by endorphins that resulted from blood loss. Lady Xoc experienced the vision after drawing a cord with spines through her tongue in a sacrifice made on the occasion of Shield Jaguar's accession to rulership on 9.12.9.8.1 5 Imix 4 Mac (AD October 23, 681). According to Schele and Miller, the "fish-in-hand" verb that immediately follows the date phrase refers to both the bloodletting and the ensuing vision.

Advancements in epigraphy generally shifted interpretations of Maya art from strictly religious meaning toward content that was more historical in nature. Although Pijoan and other researchers too readily invoked European culture theories as they built their own understandings of pre-Hispanic Mesoamerican art and architecture, they did help create a gradual recognition of the validity of this area of art historical study.⁸

In the United States, George Kubler (e.g., 1962) was another major founder of the field through his own research and teaching efforts. He directed the first art historical doctoral dissertation on a Mesoamerican topic to be written in this country, which was completed at Yale University by Donald Robertson in 1954 (published 1959; Boone 1994, xi). As the ensuing studies demonstrate, the number of disciplines represented in the investigation of Mesoamerica has greatly expanded in the following years.

THE PRESENT VOLUME: IDENTITIES OF POWER AND PLACE

The contributions to the present volume are case studies in the building of identities of power and place by Mesoamericans. Pertaining to Central Mexico (map 1.4), Oaxaca (map 1.5), and the Maya area (map 1.6), they are ordered in three parts based on the geographic structure that derives from Kirchhoff's 1943 definition of Mesoamerica. The chronological divisions followed here, which are further developments from his work, are those of The Oxford Encyclopedia of Mesoamerican Cultures. Of particular interest are the Classic period (AD 250-900, or AD 300-900, as shown in other sources), Postclassic period (AD 900-1521), Colonial period (1521-1821), and Postcolonial period (1821-present; Carrasco 2001, 214; also see Mendoza 2001; McCafferty and Carrasco 2001; Smith 2001; Taylor 2001; Tutino 2001). Another significant interval is the Late Postclassic, which in the Basin of Mexico dates from 1350 to 1521. In the Mixteca the period runs from about AD 1175 to 1521, and in Yucatán the range is from AD 1250 to 1521 (Smith 2001, table on p. 249).

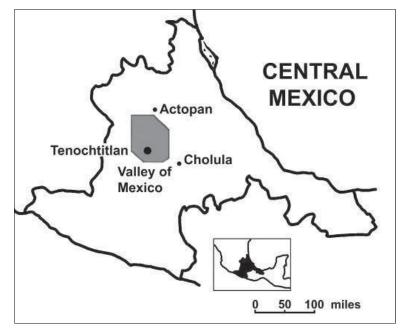
Part 1 of the narrative (Central Mexico, chapters 2–5) begins at the renowned city of Teotihuacán. ¹⁰ This site, which is located about twenty-five miles northeast of Mexico City (where Tenochtitlán, the Mexica capital that was conquered by sixteenth-century Spaniards, was built), influenced the highest levels of contemporary polities in geographically remote areas. ¹¹ Teotihuacán's fame lies partially in the concentration of exquisitely painted structures found there, and chapter 2, by the distinguished Mexican archaeologist Jorge Angulo Villaseñor and his doctoral student América Malbrán Porto, examines the meaning of one of these scenes. ¹² Located in Room 1 of the Patio Norte in the architectural complex at Atetelco, the composition features birds of prey. Considering all available information on the context of

the motif, the scholars link it to a group of warriors who gained prominence as the protectors of the birds in their natural habitat. This was the nearby Sierra de las Navajas, a well-known deposit of obsidian that sustained the overall wealth and power of Teotihuacán. They argue that the mountains are represented directly in the painting and that the bird motif is a symbol of the status brought by the local obsidian industry.

Chapter 3, by the Italian researcher Davide Domenici, analyzes the role of language in the development of imagery in the Teotihuacán paintings. While we have evidence that more than one language was spoken at the settlement, Domenici notes that juxtapositions of seemingly incongruous visual elements find logical explanations through comparisons with signs painted by later Nahuatl speakers.¹³ Also fundamental to the presentation is the identification and organization of the language-related components. This approach has enabled Domenici to find emblematic glyphic compounds in the Teotihuacán paintings, such as toponyms at the residential compound known as Atetelco. He also recognizes a place name at another compound at the site, Tetitla, that is a likely reference to a building. Among other indicators of power and place that he identifies are possible statements of titles referring to positions held by military, religious, and political figures.

Despite the loss of the chronological sequence of superimposed pre-Hispanic structures, which appear to modern visitors to be contemporaneous, and the destruction that has occurred in some buildings, Domenici finds probable syntactical statements. He comments that the Zacuala residential compound can credibly be seen as an administrative palace for a high-ranking lord and his court, with images that are emblematic of each of the four subcompounds converging toward an imposing, centrally located dais. He sees this and other residential compounds at Teotihuacán as palaces and indicators that rulership there was not through a single person. Instead, Domenici proposes that the highest level of power at Teotihuacán was distributed among members of an elite social class.

Lori Boornazian Diel, from the United States, studies in chapter 4 how the Spanish conquest changed representations of power in various Aztec pictorial manuscripts. ¹⁴ Although all known histories from Central Mexico date from the colonial era, it is evident that during the pre-Hispanic period, painted histories were highly structured compositions that emphasized connections with the calendar of the solar year. These yearly accounts of events,



Map 1.4. (a) (top) Central Mexico, showing locations mentioned in this volume. Based on Cline 1972, fig. 5; and National Geographic Society 1968. Drawn by Merideth Paxton. (b) (bottom) The Valley of Mexico, showing locations mentioned in this volume. Based on Cline 1972, fig. 6; Gibson 1964, unnumbered map preceding chapter 1; and National Geographic Society 1968. Drawn by Merideth Paxton.



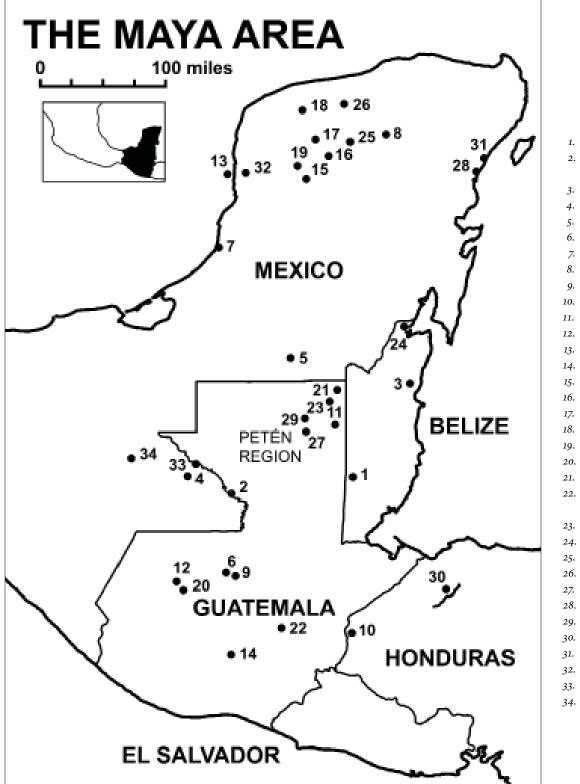


Map 1.5. Oaxaca, showing locations mentioned in this volume. Based on Cline 1972, fig. 7; National Geographic Society 1968; and Paddock 1966, map 1. Drawn by Merideth Paxton.

or annals, were part of a larger program of solar-based ideology that regulated the lives of the Mexica and gave them divine purpose. The sections in the colonial sources that pertain to the preconquest period employ the old indigenous conventions of artistic representation in showing that connections with the calendar were a device for legitimizing history.

One means of imposing sacred order was the manipulation of dates to bring them into conformance with calendrical cycles. For example, these histories could be composed in terms of parallel sets of rulers who reigned for contrived periods. The annals have been identified as characteristic of the Mexica culture to such an extent that, Diel argues, some of their subjects attempted to elevate their settlements by adopting the format. Under the Spanish, dates in the annals lost their divinely sanctioned structure of time, treating irregular intervals and becoming visually confusing. As the Tira de Tepechpan and other manuscripts included in her discussion show, the colonial purpose was also transformed from offensive, self-glorifying statements that enhanced power to records of poverty and misfortune. These were defensive strategies, designed to reduce the tribute burdens imposed by Spanish overlords.

In chapter 5 another scholar from the United States, Angela Marie Herren, analyzes the relationship between the form of Codex Aubin and the communication of its content. This colonial document was created primarily by a single indigenous scribe, who began work in the late 1550s or early 1560s and continued for about thirty years. It is probably from one of the neighborhoods of Tenochtitlán, San Juan Moyotlan. The manuscript is an annals-type history that relates Mexica events from the beginning of their twelfth-century migration in search of a place in which to settle permanently. It has secondary additions that were made until around 1608. The images are painted according to preconquest conventions, and the text is in Spanish and Nahuatl. However, as Herren establishes, Codex Aubin was additionally influenced by the European books that were then circulating widely in Mexico. Despite having been produced entirely by hand, it resembles printed volumes through its binding as a book and the inclusion of such features as lines that mimic justification marks for the margins. Herren's investigation also shows how the native scribes were supported by sixteenth-century education in New Spain. This training gave the scribe who painted *Codex*



Map Key

- 1. Actun Balam, Belize
- 2. Altar de Sacrificios, Guatemala
- 3. Altún Ha, Belize
- 4. Bonampak, Mexico
- 5. Calakmul, Mexico
- 6. Chamá, Guatemala
- 7. Champotón, Mexico
- 8. Chichén Itzá, Mexico
- 9. Chipoc, Guatemala
- 10. Copán, Honduras
- 11. Holmul, Guatemala
- 12. Ilón, Guatemala
- 13. Jaina, Mexico
- 14. Kaminaljuyú, Guatemala
- 15. Labná, Mexico
- 16. Maní, Mexico
- 17. Mayapán, Mexico
- 18. Mérida, Mexico
- 19. Mulchic, Mexico
- 20. Nebaj, Guatemala
- 21. Río Azul, Guatemala
- 22. St. Augustine Acasaguastlán, Guatemala
- 23. San Bartolo, Guatemala
- 24. Santa Rita Corozal, Belize
- 25. Sotuta, Mexico
- 26. Tekanto, Mexico
- 27. Tikal, Guatemala
- 28. Tulum, Mexico
- 29. Uaxactún, Guatemala
- 30. Ulúa Valley, Honduras
- 31. Xelhá, Mexico
- 32. Xuelén, Mexico
- 33. Yaxchilán, Mexico
- 34. Yoxiha, Mexico

Map 1.6. The Maya area, showing locations mentioned in this volume. The southern limit includes only the western edges of El Salvador and Honduras. Although the Ulúa Valley is outside the region, its residents did interact with inhabitants of Maya settlements. Based on Adams 1990, fig. 1; Cline 1972, fig. 8; Foncerrada de Molina and Lombardo de Ruiz 1979, map on pastedown; Saturno et al. 2005, fig. 2; Thompson 1999, map 4-1; and National Geographic Society 1968. Drawn by Merideth Paxton.

Aubin the knowledge necessary to make these choices, thereby enhancing its credibility and power.

Part 2 of the volume (chapters 6 and 7) treats paintings produced in the Oaxaca region.¹⁵ Chapter 6 by the Mexican researcher Alfonso Arellano Hernández discusses the power indicated by the recording of names in Zapotec tombs at the settlement of Monte Albán. As was the practice among the Mexica of Central Mexico and the Maya to the east of Oaxaca, these people employed a calendar cycle that was composed of thirteen numbers that rotated through twenty named days. The first component of a pre-Hispanic Zapotec name was the date of the person's birth within this 260-day cycle, which determined the fate of its bearer for life. Eventually, a second name, derived from animals, or other objects or qualities, was added, and the complete unit was regarded as secret. During the Colonial period, names were included in legal documents that sanctified the rights of rulers to govern and possess wealth and reaffirmed the sacredness of their lineages. Arellano finds similarities between the colonial records and the names painted, between AD 400 and 650, in three Monte Albán tombs. The tombs vary in terms of which groups were listed, and in a preliminary reading, Arellano has proposed that this difference can be interpreted as social ranking.

In chapter 7, Mexican scholar Manuel A. Hermann Lejarazu discusses concepts of power that were created by Mixtec speakers who occupied parts of the modern states of Puebla, Guerrero, and Oaxaca during the three centuries before the arrival of the Spanish. Basing his investigation in their painted codices, he studies how these people construed nearby abandoned settlements from earlier periods and how they established new dynasties. Specifically, his chapter proposes a new location in the modern geographic landscape of the place that is symbolized in the codices as Hill of the Bee or Mountain That Opens-Bee. This is the site where the first ruler of the Tilantongo dynasty, the most powerful shown in the Mixtec codices, gained legitimacy. Hermann's interpretation develops from his identification of an insect that is incorporated within the symbol of the hill that appears in Codex Vindobonensis and Codex Bodley and in a related illustration in *Codex Nuttall*. This discovery leads to names in Mixtec that can be found in old records with geographic information, as well as those current among modern speakers of the language. Accordingly, Hermann has associated the toponym in the codices with Monte Negro (Black Mountain or Hill), which is located close to the present town of Tilantongo.

Monte Negro is the site of an early settlement, largely abandoned around AD 300, with evidence of reuse for ritual purposes during the Postclassic. These periods of use may indicate that the ruins are a scene connected with the early history of the Mixtec lords in the codices, and Hermann suggests that it was through marriage to the daughter of the last ruler of Monte Negro that the founding ruler of the Tilantongo dynasty gained legitimacy. He also relates aspects of an image of a hill with a black top in Codex Nuttall to geographic features still referred to by residents in the vicinity of Monte Negro, and he finds similar comparisons with other illustrations in the Mixtec codices. Hermann considers his proposal regarding the origin of the Tilantongo dynasty to be preliminary. Nevertheless, he notes that the information presented here indicates a major shift away from current interpretations, which see the dynasty as intrusive to Tilantongo. Rather, Hermann regards the Tilantongo dynasty as a local development that emphasized this connection through rituals conducted at the place that had brought about its widely respected power, Monte Negro.

Studies pertaining to the Maya area form the final section of the book (part 3, chapters 8-12).16 In chapter 8, Mexican biologist María de Lourdes Navarijo Ornelas considers preferences in paintings of the region's fauna on ceramics produced from AD 300 to 900. She bases her analysis on the illustrations provided by Marta Foncerrada de Molina and Sonia Lombardo de Ruiz in their 1979 book, Vasijas pintadas mayas en contexto arqueológico (catálogo) (Painted Maya Vessels in Archaeological Context [Catalog]). These images show sherds and some complete pieces of pottery with decorations that may be either geometric or pictorial in form. As the title indicates, the group is further defined by the fact that its members are from known archaeological contexts, and the catalog briefly lists these. To the extent that the functions for the ceramic deposits are provided, the motifs represent the values of people in an elite social class who deposited them in complex architectural compounds and included them in caches associated with historical rulers, and, along with jade and other costly objects, in funerary offerings (further discussion of these contexts follows).

Navarijo's primary concern is the identification of the animals represented in the designs on 426 samples. She particularly considers the head and facial marks, the general form of the body, the shape and size of wings or legs, and other similar features, although recognizing the taxonomic identities is necessarily complicated by the

tendencies of the artists to stylize the organisms. Additionally, Navarijo considers her investigation to be an approximation, not a definitive study, because of the statistical nature of the collection. As she notes, when a settlement is represented by a smaller number of ceramics, each occurrence of an animal appears to have greater significance than it would in a larger sample size. Nevertheless, she sees that a zoological theme constitutes a significant part of the ceramic production that flourished in the biologically diverse Maya area.

From the frequency of and variation in the forms represented on the pottery and from comparisons with painted murals at Maya ruins, Navarijo observes that the greatest iconographic significance was attached to such birds as parrots, hummingbirds, and pelicans, as well as aquatic avians. Among the mammals, monkeys, deer, and jaguars have the greatest prevalence, and fish and amphibians also figure in these animal representations. Fantastic composite creatures are another major aspect of the artistic conceptions, as are single elements, such as bundles of feathers held by men shown as rulers and by their elaborately dressed visitors. In sum, the animals discussed in this contribution were an important reflection of the natural world around the Classic period Maya, and some of the painted designs indicate that feathers and other animal elements helped communicate high status.

The examples considered in Navarijo's biologically oriented study typically have artfully applied designs, which in itself suggests that the pottery belonged to members of a wealthy social class. As the ensuing discussion shows, the archaeological literature that complements her research confirms that connection and demonstrates what defines Classic period social elitism at the three sites with the largest sample sizes (see Navarijo's table 8.1; table 1.1; chapters 9 and 10 of this book also explicitly describe elite Maya life of this period). The three settlements are Uaxactún and Tikal, in Guatemala, and Copán, in western Honduras. At Copán, the caches listed in the Foncerrada and Lombardo catalog (FL) were buried at the bases of four sculptures (Stelae I, J, M, and 3) that depict historical rulers or, in the case of Stela J, can otherwise be associated with a specific reign. ¹⁷ Ceramics in three of the four caches (found with Stelae I, J, and M) include animal representations.

Among the Copán pieces from funerary contexts, a substantial number of those with obvious zoological motifs were associated with jade and frequently also with other costly offerings.¹⁸ One particularly striking example is the cylindrical vase that comes from Tomb 1-38

(fig. 1.1; see Robisek 1972, plate 242 for a color photo.). This vase shows four high-level men, all of whom are elaborately dressed. They wear nose ornaments, embellished capes, and richly plumed headdresses. Because their headdresses are more complex and they each hold a staff, two of the men represent a higher level of authority. The lower-ranking participants offer objects, which could be additional items of clothing, to their superiors. Nevertheless, there is considerable unity among the four figures in that their capes are virtually identical. Moreover, the costuming that delineates the status of each of the men includes a nearly complete bird, shown on each of their backs.

Tomb 1-38 is located immediately south of a group of large, impressive ceremonial structures. Although it was almost destroyed to permit later pre-Hispanic constructions, additional offerings, a jade bead and the fragment of a pyrite mirror, were found there (Longyear 1952, 44). These items verify the importance of the male in the burial. In fact, early explorers and archaeologists working in Mesoamerica were exclusively attracted to the ruins of monumental architecture because they came to associate them with discoveries of sophisticated, beautifully crafted objects left by elite members of the local social hierarchies (Willey and Sabloff 1980, 47–66).²⁰

At Uaxactún, many of the samples in the Foncerrada and Lombardo catalog come from locations that are not identified precisely in the original report (Smith 1955), and these include sherds bearing artfully painted animal elements (e.g., FL 75, which shows a bundle of feathers held by a human, a monkey, a bird with a snake wrapped around its beak, and a creature that may be a large insect). These are most likely to have come from the ceremonial precinct because A. L. Smith (1950, 71-72) stated that there had been almost no investigation of the house mounds and platforms that represent the common people. Six ceramics with animal motifs are cataloged as items in human burials, and all of these are associated with the structures known as Group A of the ceremonial area. All of the interments, which represent both the Early and Late Classic periods, are of males who are accompanied by the indications of high social status that are to be expected from their architectural contexts.²¹ Other samples with zoomorphic forms are known from excavations in the structures that compose this group, and one example comes from a building in Group E (Temple E-1). Thus, numerous pieces of pottery show the importance of the animals in the catalog to the powerful Maya class at Uaxactún.

Table 1.1. Illustrations in Spanish- and English-language sources of ceramics from Copán, Tikal, and Uaxactún

COPÁN

Spanish: Foncerrada de Molina and Lombardo de Ruiz 1979

English: Longyear 1952 (unless otherwise specified)

		English. Longyear 1932 (unless otherwise specified)	
IMAGE NUMBER	PAGE	CONTEXT	FIGURE NUMBER
1	60	Trench 1-42, south of the Acropolis	117, f
2	60	Trench 1-42, south of the Acropolis	117, e
3	61	Grave 3-46	106, c, c'
4	61		67, a, a', a"
5	62	Mound 36	Lothrop 1936, 27
6	62	Grave 3-42	105, k
7	62	Grave 19, Mound 36	104, b
8	63	Tomb 2	108, b
9	63	Grave 3-38	110, c
10	64	tomb offering	Dockstader 1972, 4
11	64	Grave 28, Mound 36	104, i
12	65	Grave 28, Mound 36	104, h
13	65	burial chamber	107, f
14	66	substela cache, Stela J	113, c
15	66	substela cache, Stela J	113, a
16	67	tomb offering	Dockstader 1972, 5
17	67	substela cache, Stela I, west arm of chamber	Strómsvik 1941, 16b
18	68	Tomb 1	107, h, h'
19	68	Burial 28, Mound 36	15, k
20	69	Tomb 1	107, g
21	69	Tomb 15-42	118, d
22	70	Grave 1-39	105, e
23	70	Grave 28, Mound 36	104, k
24	71	Tomb 2	108, a, a', a", a"'
25	72	tomb offering	Dockstader 1972, 6
26	72	substela cache, Stela J	113, d
27	73	tomb offering	Dockstader 1972, 8
28	73	Tomb 1	107, e
29	74	tomb	Dockstader 1972, 8
30	74	tomb	Dockstader 1972, 4
31	75	tomb offering	Dockstader 1972, 6
32	75	substela cache, Stela I, west arm of chamber	Strómsvik 1941, 16a
33	76	tomb offering	Dockstader 1972, 8
34	76	Tomb 1-46	111, n
35	77	Grave 20, Mound 36	104, f, f '
36	77	Tomb 1-39	110, d, d'
37	78	substela cache, Stela I, possibly associated with the Stela I altar	112, h
38	78	Grave 2-42	105, j
39	78	Tomb 1	107, c
40	79	Grave 19, Mound 36	104, b

IMAGE NUMBER	PAGE	CONTEXT	FIGURE NUMBER
41	79	substela cache, Stela I	112, j
42	80	substela cache, Stela I	112, i
43	80	substela cache, Stela M	114, f
44	81	tomb offering	Dockstader 1972, 9
45	82	tomb	Dockstader 1972, 7
46	83	substela cache, Stela I, west arm of chamber	112,1
47	84	substela cache, Stela M	Strómsvik 1941, 16c
48	84	Graves 34 and 35, Mound 36	104, m, m', m"
49	85	general diggings	118, e, e', e"
50	86	Tomb 18-42	111, k
51	86	Tomb 1-46	111, m
52	87	Grave 26-42	118, a, a', a"
53	87	substela cache, Stela I, possibly associated with the Stela I altar	112, k
54	88	Trench 1-41	118, h, h'
55	89	Grave 2-42	117, g, g'
56	90	Burial 3-38	105, d, d'
57	91	Tomb 1-38	117, h, h'; see Robicsek 1972, plat 242, for a color photo
58	92 & color plate on opposite p.	Tomb 2	107, a, a', a'', a'''
59	93	Tomb 1	107, b
60	93	substela cache, Stela I	112, m
61	94	Grave 2-42	118, g, g'
62	95	Tomb 13-42	117, c
63	95	tomb	Dockstader 1972, 6
64	96	tomb	Dockstader 1972, 5
65	97	Tomb 11	109, h
66	97	tomb	Dockstader 1972, 6
67	97	substela cache, Stela M	114, c
68	98	Grave 1-40	118, f, f'
69	99	tomb	Dockstader 1972, 4
07	,,		
70	99	Tomb 18-42	118, b
		Tomb 18-42 Grave 1-43	118, b 118, c, c'
70	99		
70 71	99	Grave 1-43	118, c, c'

TIKAL

Spanish: Foncerrada de Molina and Lombardo de Ruiz 1979

English: Culbert 1993 (unless otherwise specified)

IMAGE NUMBER	PAGE	CONTEXT (SEE PAGES IN COGGINS 1975)	FIGURE NUMBER
1	194	Burial 48, in North Acropolis, pp. 187–201	28, c
2	195	Burial 10, Str. 5-34, pp. 146-76	18, a

TABLE 1.1. (continued)

IMAGE NUMBER	PAGE	CONTEXT	FIGURE NUMBER
3	196	Burial 10, Str. 5-34, pp. 146-76	21, a
4	196	Burial 134, Str. 7F-30, p. 314	46, b
5	197	Burial 150, Str. 7F-30, pp. 319–24	47, b
6	197	Burial 140, Str. 7F-30, pp. 315–17	46, a-2
7	198	Burial 159, Str. 7F-31, pp. 325-29	48, b
8	198	Burial 200, Str. 5D-22-1st, pp. 360-69	Coggins 1975, fig. 92c
9	199	Burial 23, Str. 5D-33, pp. 372-80	40, b
10	199	Burial 116, beneath Temple I, pp. 456–512	65, b
11	200	Burial 116, beneath Temple I, pp. 456-512	67
12	200	Burial 116, beneath Temple I, pp. 456–512	66
13	201	Burial 196, Str. 5D-73, pp. 552-85	95, b, c
14	201	Burial 196, Str. 5D-73, pp. 552-85	96, a
15	202	Burial 196, Str. 5D-73, pp. 552-85	96, b
16	202	Burial 147, Str. 6B-9, pp. 440-43	78, a-2
17	203	Burial 6, Temple I (room with Lintel 3), p. 590	Coggins 1975, fig 145a
18	203	Burial 77, Str. 5D-11, pp. 585-90	57, c-1
19	204	Burial 77, Str. 5D-11, pp. 585-90	57, c-2
20	204	Deposit 19 over Burial 22, Str. 5D-26, pp. 263-66	122, d
21	205	Burial 24, North Acropolis, North Terrace, Str. 5D-33, pp. 382–87	42, a
22	205	Burial 183, Str. 5D-46, pp. 309-11	49, a-1
23	206	Burial 200, pp. 456–512	Coggins 1975, fig. 93a, b
24	206	Burial 72, Str. 56-8, pp. 329-34	42, c
25	207	Burial 22, Str. 5D-26, pp. 123-46	22, a, b, c
26	208	Burial 48, Str. 5D-33, pp. 187-201	30, b
27	209	Burial 22, Str. 5D-26, pp. 123-46	24
28	210 & color plate on opposite p.	Burial 10, burial chamber beneath Str. 5D-34, pp. 146-76	16
29	211	Burial 10, burial chamber beneath Str. 5D-34, pp. 146-76	19, c
30	212	Burial 10, burial chamber beneath Str. 5D-34, pp. 146–76	19, b
31	213	Burial 22, Str. 5D-26, pp. 123-46	26, c
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UAXACTÚN

Spanish: Foncerrada de Molina and Lombardo de Ruiz 1979 English: Smith 1955 (unless otherwise specified)

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Figure 1.1. A polychrome vase with human-figure design, Tomb 1-38, Copán, Honduras. From Longyear 1952, fig. 117 h and h'.

In an extensive study of the ceramics of Tikal, Clemency Coggins (1975, 4-5) described a series of archaeologically identifiable characteristics that generally delineate the elite Maya social class. This group of people, which controlled the political and economic forces of the communities, generated the monumental art and architecture that was concentrated in the ceremonial centers. Coggins notes that their constructions consist of vaulted masonry structures, as well as architectural sculpture and carved stone stelae. Ceramics with painted surfaces follow the same distribution. She observes that painted sherds are most numerous as construction fill in the buildings and middens associated with vaulted masonry structures, and it is assumed that this locally made pottery was used in the same areas. Further, tombs and burials that are linked with monumental sculpture and vaulted architecture have produced most of the intact decorated objects.²² Coggins views all decorated items at Tikal as possessions of the elite, and this would naturally include the pottery cataloged by Foncerrada and Lombardo.

Burial 10 was found in the ceremonial area of Tikal, dug into the front of the North Acropolis in a place that was subsequently covered by construction (Culbert 1993, fig. 14 caption). It is from the Early Classic, dating to around AD 420 (Iglesias 2003, 187). The furnishings, including nine human sacrificial victims, generally indicate wealth and provide insights concerning the Maya use of animals to replicate the world of high status enjoyed by the interred ruler during his life. He was also accompanied by modified stingray spines, freshwater snails, scallop and oyster shells, turtle carapaces, a headless crocodile skeleton, two pygmy owls, green jays, and an ant tanager. The tomb further held a pair of large mosaic earplugs with serpent designs. Coggins observed that these are more typical of Central Mexico than the Maya region in terms of both the

conception of the serpents and the mosaic technique. Additionally, the burial included thirty-two ceramic vessels, some of which were of local origin. Among the latter is a cylindrical container (FL 47; Culbert 1993, fig 19a) with tripod supports and a lid; on its sides are two seated figures with plumed headdress elements.²³

Three of the ceramics in Burial 10 have animal motifs that are especially noteworthy because their designs can be related to the presentations in chapters 2 and 3 of this volume. Angulo and Malbrán have commented on the importance of Teotihuacán obsidian in the expansion of the political power of the site into other regions, and Domenici has noted the occurrence of Teotihuacán iconography in the Maya area at Xelhá, Yucatán. The Burial 10 images on the ceramic pieces resemble Teotihuacán paintings discussed by these authors. One such example shows two men with bird headdresses and two who wear headdresses with stylized creatures, possibly serpents or jaguars, or combinations of both (fig. 1.2). The conception of the forms is non-Maya in that curves are angular and stiff rather than fluid. The proportions of the faces follow those often found at Teotihuacán, and the goggle-like shapes that emphasize the eyes are much more common there as well.

The Teotihuacán-like designs on the three vessels have figured in broader discussions of the nature of Maya interaction with the Central Mexican site (e.g., Braswell 2003). None of these pieces, which have similar clay characteristics, was made at Tikal (Culbert 1993, figs. 15–17 captions). Culbert mentioned that one of the items (his fig. 15) closely resembles an example found at Kaminaljuyú, in the distant highlands of Guatemala (see map 1.6). This is another Maya settlement where similarities to Teotihuacán can be recognized in architecture as well as pottery. Culbert added that the excavators of Kaminaljuyú regarded

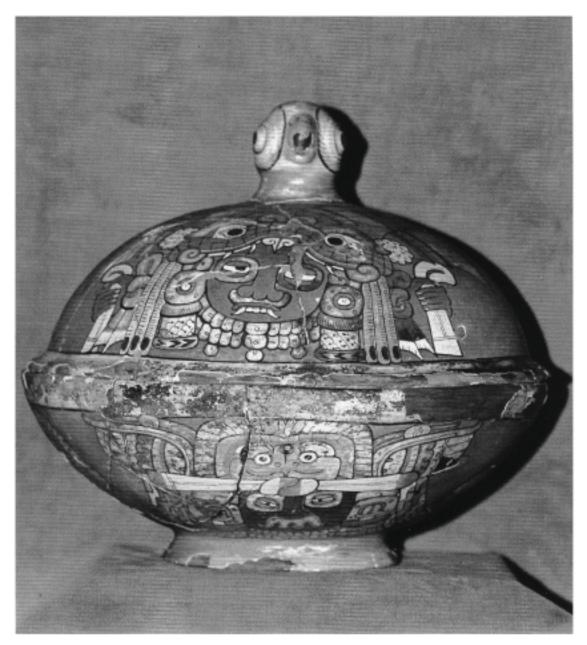


Figure 1.2. A covered bowl with Teotihuacán-related designs, painted in polychrome on stucco surfaces, Burial 10, Tikal, Guatemala. From Foncerrada de Molina and Lombardo de Ruiz 1979, plate between pp. 210 and 211. Courtesy of the Dirección General de Patrimonio Universitario, Universidad Nacional Autónoma de México.

those ceramics as imports from Teotihuacán. Coggins (1975, 140–45) noted the presence of strong influences from Teotihuacán on two Tikal sculptures (Stelae 4 and 31) that pertain to a historical ruler.²⁴ In discussing the Burial 10 ceramics, she made numerous connections with Kaminaljuyú, which led her to propose that the highland settlement had served as a trade center with Teotihuacán (Coggins 1975, 145–48).²⁵ Partly because of a jade bead carved to represent a creature with a

backward-curving snout that was found in the tomb, she interpreted the main skeleton as the person depicted on Stela 4 and on the sides of 31. She identified him as Curl Nose from the accompanying hieroglyphic texts; he is now known as Yax Nuun Ahiin I (Martin 2003, 11–17; Martin and Grube 2008, 32–33). Coggins suggested that Kaminaljuyú was the place where inhabitants of the region around Tikal (the Petén) obtained Teotihuacán obsidian, and she sees the ruler Yax Nuun Ahiin I as a

probable nobleman who served as an emissary from the trade center. According to her, he could have gained political legitimacy at Tikal by marrying into an existing dynasty.

The most important skeleton in Burial 10, thought to be Yax Nuun Ahiin I, was extended, and the archaeologist who directed the excavation, William Coe (1990, 482-84, 486), concluded that it had lain on a litter or other wooden bier.26 Traces of cinnabar were detected among the upper surfaces of the bones, and the forehead was "brightly reddened." Indications of a headdress were found nearby, as were jade beads and other ornaments. Nine unslipped cylindrical jars with lids suggested that food had also been left in the tomb. The exteriors of the containers had yellow stains and cord marks; they had evidently been wrapped and tied closed. Only one of them had identifiable contents: "squash seeds and yellow decay." Coe (1990, 486) remarked that the squash seeds were the only sign that the pottery had actually held anything, although he surmised that at least some of the other jars might have had "potables so liquified as to leave no trace."

The many rich trappings that surrounded the Tikal lord in Burial 10 suggest how he lived. In fact, the evidence of use prior to placement in the tomb that occurs on most of the pottery (Coe 1990, 486) supports the notion that these were his personal belongings while he was in power. Of particular interest to the main theme of this volume is the fact that animals figure prominently in the lord's tomb furnishings as offerings and as designs on ceramics, some of which speak of high-level foreign connections. However, while Burial 10 clarifies some aspects of royal life in Early Classic Tikal, it also raises tantalizing questions about the nature of the substances that had vanished from the carefully wrapped containers long before their discovery by archaeologists.

Chapter 9 by María Luisa Vázquez de Ágredos Pascual and Cristina Vidal Lorenzo, both of whom are from Spain, applies archaeometric techniques that were not available during the excavation of Tikal Burial 10 to build our knowledge of ephemeral elements that helped define noble courts of the Maya, especially those of the Classic period. The analysis consists of Light Microscopy (LM), Scanning Electron Microscopy–Energy Dispersive X-ray microanalysis (SEM-EDX), Fourier Transform Infrared Spectroscopy (FTIR), and Gas Chromatography–Mass Spectrometry (GC-MS). The authors also studied the specialized literature on the technology of perfume and body paint in antiquity as it pertains to the toxicity of

some of the products employed by the ancient Maya in their preparations. Their observations are further drawn from images on polychrome pottery and statements recorded in Spanish colonial documents.

The offerings under study were found in the tombs of high-ranking residents of El Peru-Waka', La Lagunita, and Río Azul, all of which are in Guatemala. Vázquez and Vidal describe the two basic elements in perfumed ointments used cosmetically: the aromatic essence and the excipient. The latter is generally animal fat or a vegetable additive used to filter the aromas. Testing of deposits has identified the use of animal fats in the manufacture of cosmetic products since the Early Classic period, as was shown by GC-MS of red pigment found in Tomb 19 at Río Azul. The sample was part of the offering found on a polychrome plate. Images on Classic period ceramics clearly show the importance of body paint, especially red, and the authors provide information on its composition and use. The analysis of samples from tombs at these three sites, as well as other burials of high-level Maya noble figures, have established how these paints were formulated. Illustrations on polychrome ceramics and the residues of tomb offerings have also demonstrated uses of other, less popular, colors of body paint. All of the cosmetic substances discussed in the chapter were central to the rituals that demonstrated the elevated status of these Classic period Southern Lowland Maya.

In chapter 10, Ana García Barrios, also from Spain, focuses on the Classic period Maya use of food to express social rank at Calakmul, Campeche, Mexico. She notes that this usage can be seen on painted vases that show high-level dignitaries, accompanied by priests and scribes, who consume items that are sometimes identified in hieroglyphic texts. Her primary research interest is the pictorial narrative on the Pyramid of the Paintings at Chiik Nahb'. As is to be expected from the preceding discussions, this construction is in the center of the Chiik Nahb' Acropolis. Ceramic evidence indicates that the painted images date from around AD 620-700, which is in agreement with the Late Classic style of their related hieroglyphs. The chapter melds iconographic and epigraphic insights with colonial accounts and modern ethnographic reports concerning the food motifs and their significances.

The Calakmul series, painted in vivid colors on the exterior of the pyramid, is comparable to the polychrome scenes on the Classic period ceramic vessels we have mentioned. García Barrios's research shows that corn is the primary food being eaten by the ornately attired

participants recorded on the pyramid. The companion texts serve as labels, and the readings of the glyphs by Simon Martin, the project epigrapher, are in agreement with this interpretation. Many of the paintings show corn as a beverage or in a more solid, dough-based form. In most cases, it is clear that women are responsible for handling the food and offering it to the men who wear impressive headdresses made of netting. These elite men consume the items, an action that is otherwise unknown in the corpus of Maya art. For the first time, food plays a primary role in scenes where it is described in texts and is also shown being eaten by high-level people. The location of the Pyramid of the Paintings on Chiik Nahb', in a space that was important to political events of the time, suggests that these could be depictions of the delivery of royal tribute and accompanying festivities.

With chapter 11, the research on the Maya moves to the northern part of the Yucatán Peninsula and also shifts from the Classic period to the Postclassic. This study, by Susan Milbrath (United States), Carlos Peraza Lope (Mexico), and Miguel Delgado Kú (Mexico), analyzes paintings at the site of Mayapán, which was the capital of the latest centralized pre-Hispanic government in the northern region. The particular focus is iconographic transformations over time in murals found in three structures with atypical architecture. From the dates of their host buildings, the authors observe that all of the paintings were created relatively late (AD 1350/1400-1450) in the history of the settlement. Nevertheless, they reflect diverse, chronologically significant sources that influenced the treatments of their main theme, Mesoamerican cosmology and related religious beliefs.

The painting associated with the Temple of the Fisherman (Structure Q95) is regarded as probably the earliest of the three murals. Perhaps due to influence from Tulum, Quintana Roo, it is thought to be related to murals found along the east coast of the Yucatán Peninsula as a variant of what has been called the International Style. It is primarily, but not exclusively, devoted to Maya cosmology and calendar rituals. The second mural, in the Temple of the Five Niches (Q80), seems more closely linked with the fully developed Mixteca-Puebla style, especially the traditions seen in the Puebla-Tlaxcala area and Oaxaca. Tentatively dated later than the Temple of the Fisherman mural, it has imagery of Quetzalcoatl-Kukulcan like that seen in Cholula and other Central Mexican sites. The Hall of Solar Symbols (Q161), which holds the latest mural in the sequence, shows stylistic links with Aztec murals, or more

specifically the Mexica murals from the Templo Mayor, which would indicate contact with the capital city at Tenochtitlán in the Valley of Mexico. This may be due to the presence at Mayapán of Mexican mercenaries, which is described in historical records. Thus, the investigation is also concerned with influences from external polities on the development of murals prominent in the center of religious and political power at Mayapán.

The subject of chapter 12, by US scholar Merideth Paxton, is the memory of a Yucatec Maya painting that is preserved in a seventeenth-century Spanish colonial book. First published in 1688, the Historia de Yucatán, by Friar Diego López de Cogolludo, includes a single illustration, which blends Maya and European elements. The most obvious Maya aspect is the band of portraits around the perimeter of the image; it shows thirteen men, all of whom are identified by their Yucatec names. The overall composition recalls a Spanish coat of arms, and additional motifs include a tree rendered according to European conventions of perspective. Despite these non-Maya elements and some contradictory information in López de Cogolludo's accompanying text, the placement of the tree in the center of the design suggests that it may represent the yaxcheel cab, a key symbol in the pre-Hispanic Yucatec system of the world directions. The main concern of this investigation is whether the tree and other forms in the scene can be interpreted as a Colonial period representation of the solar-based directional scheme that provided a sacred ordering of time and space during the preconquest era. This directional scheme worked in combination with the Maya calendar to predict the overall fates of communities and control the rotation of ritual and political power.

López de Cogolludo commented that the illustration published in his Historia was based on an Indian painting in the town of Maní, a place that was famous for its archive. In 1841-1842, the writer John L. Stephens and his artist, Frederick Catherwood, traveled extensively in the Yucatán Peninsula, including a visit to Maní. There they saw an old painting that must have been the source mentioned by López de Cogolludo. Stephens described how they were shown a copy of the 1688 book. Then the Maya produced the original painting, made on cotton cloth, which they rolled out onto the floor for viewing. The present research considers the historical meaning of the published image, its relationship to other Maya diagrams of time, and its connection with pre-Hispanic iconography. This analysis supports the conclusion that the López de Cogolludo illustration does indeed preserve evidence

of the pre-Hispanic Maya tradition of the sacred world directions after the imposition of European power.

In addition to the primary theme of indigenous Mesoamerican constructions of power and place, secondary themes connect the chapters. One of these subthemes pertains to Kirchhoff's ([1943] 1960, 7-9) previously mentioned list of characteristics that define Mesoamerica as an entity separate from the adjoining regions to the north and south. This topic is uses of Calendar Round dates, which are, as noted earlier, formed by combining a date in a 365-day cycle (eighteen months of twenty days each, plus a five-day period before the beginning of the next rotation) with one from the companion 260-day cycle (the association of thirteen numbers with twenty day signs). Since Calendar Round dates are often linked with history and related predictions of the future, they can be seen as an aspect of the more general subject of the social construction of the natural environment. The latter is additionally evident in chapters pertaining to astronomy, animal symbols, the habitats of the creatures, the kinds of corn grown and their consumption, and the materials that produced cosmetics. Also of interest to multiple authors are the relationship between text and image and the preservation of cultural heritage.

The Kirchhoff characteristics are succinctly stated; they are clustered around only eight categories of cultural descriptors. Since their 1943 publication, researchers in this burgeoning field have developed a much broader and also more precise knowledge of the people who occupied Kirchhoff's original geographic boundaries. These efforts have conveyed a greater sense of immediacy regarding the Mesoamericans. We have a closer affinity with them because, for example, we know the probable name of the ruler who was portrayed on Stela 31 at Tikal and placed in Burial 10 there. While their results increase the general understanding of what the concept of Mesoamerica represents, the contributors to this volume also draw readers closer to the people who created the intriguing paintings under study. Alfonso Arellano Hernández has disclosed the likely names of elite residents interred at Monte Albán and explained why that information was and is so special. Manuel Hermann Lejarazu has identified the strategy by which the man, or political group, who wished to found the new Tilantongo dynasty near Monte Negro accomplished the objective, and similar statements can be made regarding the human aspects of the remaining chapters. It is with this thought that the individual investigations begin.

NOTES

- The term codex is more properly applied to volumes whose pages are bound along the left side, in the European manner. Although the pre-Hispanic Mesoamerican books were typically formed from long strips of animal skin or bark paper that were folded accordion style into pages, they are also commonly referred to as codices.
- 2. This fact is posted at http:mari.tulane.edu/generalhistory. html, accessed April 21, 2015.
- 3. These terms were evidently in general use at the time Kirchhoff was writing. The contrast does not appear to be between hunters and gatherers and sedentary agriculturalists. Elsewhere in the discussion, Kirchhoff (1952, 19, 1960, 1) mentions the food gatherers and fishers of North America in a list that also contains the phrases "inferior cultivators of North America," "inferior cultivators of South America," and "hunters and gatherers of South America." The same list parenthetically refers to the superior cultivators as the "High Cultures." Later in the text, he expresses the view that there were both superior and inferior cultivators in South America (Kirchhoff 1952, 27, 1960, 11). Hoopes and Fonseca Z. (2003, 51) have characterized Kirchhoff's dichotomy as ethnocentric.
- 4. For more complete discussions of the history of Mesoamerican archaeology, see Bernal 1980 and Willey and Sabloff 1980. As the latter authors show, interest in chronology dates from around 1914. Trigger (2006) provides a worldwide overview of archaeological theory, including Mesoamerican developments.
- 5. Toussaint had in 1930 created the Seminario de Investigaciones del Arte en México in order to help the personnel of the Secretaría de Hacienda in their task of cataloging the religious constructions in the country that had become the property of the government. In 1935 he was one of the organizers of the Laboratorio de Arte at the Universidad Nacional, which became the Instituto de Investigaciones Estéticas (Weismann 1967, viii, http://www.esteticas.unam.mx/node/33, accessed April 30, 2015).
- 6. Another early publication that is noteworthy for its similar outlook is Herbert Spinden's *Study of Maya Art* ([1913] 1975). Quoting Miguel León Portilla, Kubler (1991, 155) notes that Toscano's study has been recognized as "the first major work to view the art of Mesoamerica in its entirety, with an *esthetic criterion* and adequate archaeological information."
- Such dates record units measuring the number of days that have transpired since the beginning of the calendar system.
- 8. The intrusive influence of European art history can also be seen in a study by Paul Westheim. He pondered whether the art of Teotihuacán might meet Heinrich

- Wölfflin's definition of classic art as stated in his influential *Principles of Art* (Westheim [1950] 1965, 144–45). The latter was based on analysis of the Italian Renaissance. For further discussion of Westheim's scholarship, see Kubler 1991, 141–43.
- 9. Acceptance of the validity of the field was not immediately universal in the United States. Pál Kelemen ([1979?], 5–6) remembered that at the Peabody Museum of Harvard University, it "took some time to convince Dr. Alfred M. Tozzer, professor of archaeology and a distinguished educator, that the ancient American civilization has an esthetic value about which neither Europe nor America was aware." Kelemen was arguing the need for an illustrated survey volume, which he published in 1943, and Tozzer did eventually support the project.
- 10. For an introductory survey of Mesoamerica, see Miller (1986) 2012; for an overview that does not include the Maya area, see Coe and Koontz (1962) 2013. Miller and Taube (1993) summarize Mesoamerican religion.
- 11. The Early Classic (late fourth through sixth centuries AD) connections with major Maya sites have been of intense scholarly interest for many years, as is summarized in a research collection edited by Braswell (2003). Braswell (2003, 7) observes that Teotihuacán iconography (symbolism) continued to inspire Maya artistic representations during the Late Classic period (AD 600–900), long after the fall of the central Mexican city (which occurred around AD 650–750).
- 12. For a complete catalog and studies of the paintings, see De la Fuente 2001. For an overview of the paintings with the accompanying text in English, see Miller 1973.
- 13. At the time of Spanish contact, Nahuatl speakers occupied the area around the Mexica capital, Tenochtitlán, which now lies beneath Mexico City (see map 1.4).
- 14. For additional information on the culture in general, see León-Portilla 1963; Nicholson 1983; Pasztory 1983; and Soustelle 1961.
- 15. The paintings in the pre-Hispanic architectural contexts of Oaxaca are cataloged in De la Fuente and Fahmel Beyer 2005. For overviews of the cultural area, see Joyce 2010; Spores and Balkansky 2013; and Whitecotton 1977.
- 16. For an overview of the paintings in architectural contexts in the Maya area, see Staines Cicero 2001. For a cultural overview, see Coe and Houston (1966) 2015; Miller and O'Neil (1999) 2014; and Sharer 2006.
- 17. The associated samples are Stelae I (FL: 17, 32, 37, 46, 60), J (FL: 14, 15, 26, 42, 53), M (FL: 40, 47, 67), and 3 (FL: 41, 43). (See table 1.1 for a concordance of reproductions in Englishlanguage sources that are equivalent to the Foncerrada and Lombardo illustrations. I (Paxton) have not seen the unpublished Dockstader paper of 1972.) For photos of the sculptures and additional information on their interpretations, see Fash 2001, 87, 80, 113–14, 26, 138–39; Maudslay

- (1889–1902) 1974, 1:plates 63, 66, 67; and Spinden (1913) 1975, plate 19 (3). Classic period Maya elitism is also discussed by Jackson 2013.
- 18. These are FL 19, 20, 23, 24, 25, 27, 29, 44, 45, 50, 55, 57, 61, 64, 65, 66, 70, 73, 74.
- 19. Longyear (1952, 44) observed that the vase is unique within the corpus of the Copán ceramics. The subject of richly attired men, with clothing that includes animal elements, is part of the usual repertoire, but it is the manner of the representation that makes this piece different. Perhaps it came from another settlement and was more highly valued for this exoticism.
- 20. However, I (Paxton) would investigate further before concluding that the elite goods of Copán come only from the ceremonial sector. Tombs have proved to be important sources of this material, and they are widely dispersed. Longyear (1952, 40) commented, "No definite areas in the Copan Valley appear to be devoted to tombs, although there are indications of certain concentrations. These may be actual, or merely the result of more exploration in some regions than in others. At any rate, most of the tombs reported so far lie south of the Acropolis—some in the 'cemetery' area . . . others between that and the Main Structure. A second and less well defined concentration occurs to the north, between the Acropolis and the hills forming the northern limit of the Copan Valley. For the rest, a few tombs are reported from the Acropolis itself, and from widely scattered spots in the valley."
- This summary is based on Smith 1950, 88 and table 6, found between pages 88 and 89. All of the burials are primary, with possible exceptions of Burial A10 (secondary?) and A4 (primary?). The six interments with ceramics decorated with animal motifs and their accompanying offerings are A22 (FL 42): Early Classic, Structure A-V; face bones and teeth missing, red ochre on other bones; accompanied by jade, shell, stingray spine, copal incense, textile impression, bone tube. A10 (FL 44): Late Classic, Structure A1; teeth had been prepared for inlay; buried with iron oxide. A23 (FL 47): Late Classic; jade and stingray spine. A31 (FL 54): Early Classic, Structure A-V; artificial head deformation; red ochre on bones; accompanied by iron oxide, ungual phalanges of jaguar, skeleton of quail, bone tube. A4 (FL 55): Late Classic, Structure A1: iron pyrite inlay in teeth. A2 (FL 56): Late Classic, Structure A1; shell, jade, iron oxide, stingray spine, bone necklace, animal bones.
- 22. Monumental architectural constructions and their associated art objects are likely indicators of high status elsewhere in Mesoamerica. However, this is not always the case. As Angulo Villaseñor and Malbrán Porto note in chapter 2, La Ventilla complex at Teotihuacán included elite residences, but the space additionally hosted a craft workshop and lower-class living areas. Moreover, members

- of one level of merchants in Tlatelolco, which was allied with Tenochtitlán, hid their wealth to avoid being killed by jealous kings (Bittman and Sullivan 1978).
- 23. This summary is based on Coe 1990, 479–87; and Coggins 1975, 146–76.
- 24. She remarked that she was largely summarizing verbal accounts provided to her by Tatiana Proskouriakoff (Coggins 1975, 140).
- 25. For further information on Mesoamerican trade, see Hassig 1985; Hirth 1984; Hirth and Pillsbury 2013; and Lee and Navarrete 1978.
- 26. Coe (1990, 486) observed that the contents of the tomb do not follow Kaminaljuyú practices in ways that establish a definite connection; some of the offerings found at both places are ubiquitous. Interments at Kaminaljuyú were subject to variation but often included dogs and paired manos and metates, which were not present in Burial 10, and the deceased were in seated positions. A possible explanation is that Yax Nuun Ahiin I's burial was consistent with those of the Tikal culture into which he had become integrated.

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PART ONE

Central Mexico

The Teotihuacán Obsidian Industry and the Birds of the Sierra de las Navajas

Jorge Angulo Villaseñor and América Malbrán Porto



tetelco, a residential compound in Teotihuacán, was found during the middle of the twentieth century as a result of prolonged looting. That discovery led to formal excavations and methodical reconstructions in the central core of the architectural unit, where the Patio Blanco¹ and the Patio Pintado² are situated. The painted motifs that predominate on the walls in the Patio Blanco have been described as anthropomorphic figures dressed in zoomorphic attire and armed with arrows and shields. On account of that iconographic theme, Atetelco has been regarded as the most important locus of activity for the Teotihuacán warriors. This chapter focuses on analysis of the fragments rescued from the debris of the upper sections of the painted walls in Room 1 of the Patio Norte (fig. 2.1), which are now exhibited in the Teotihuacán Museum of Mural Paintings (Museo de Murales Teotihuacanos Beatriz de la Fuente).³ Our study identifies a major visual element of the reconstructed mural as the nearby Sierra de las Navajas. We additionally discuss the associated bird theme and incorporate the sierra motif into our overall interpretation of the painting and its architectural setting.

We begin with a brief review of archaeological and other interventions in Teotihuacán that date from the sixteenth century. These include the sequence of the excavations in this compound, including those now in progress under the direction of Ruben Cabrera, and criticism of earlier iconographic analyses. We emphasize the necessity of

placing the mural under study in its original context (at least virtually), where it can be related to the patios that form the remaining sectors of this cem ithual tin, or apartment compound. Based on Sergio Gómez Chávez's meticulous excavations of several compounds in La Ventilla, another settlement on the periphery of the Teotihuacán ceremonial precinct, and the insightful study by Mark Thouvenot of the architectural distribution of spaces of the Mexica, this chapter interprets the patios of Atetelco as the place where various military groups, such as the bird-ofprey warriors, maintained their principal headquarters.⁵ The mural suggests that these warriors controlled the extraction of obsidian and were responsible for the protection, conservation, and administration of the Sierra de las Navajas. As we discuss, the obsidian provided major support for the position of influence that Teotihuacán occupied in the broader Mesoamerican world.

BACKGROUND AND METHODOLOGY

The Room 1 Mural in the Excavation History of Teotihuacán

Of all the known pre-Hispanic settlements, Teotihuacán has one of the most extensive excavation histories. During the sixteenth century Sahagún and Torquemada made reference to the place. In 1675 Carlos de Sigüenza y Góngora initiated exploration of the Pyramid of the



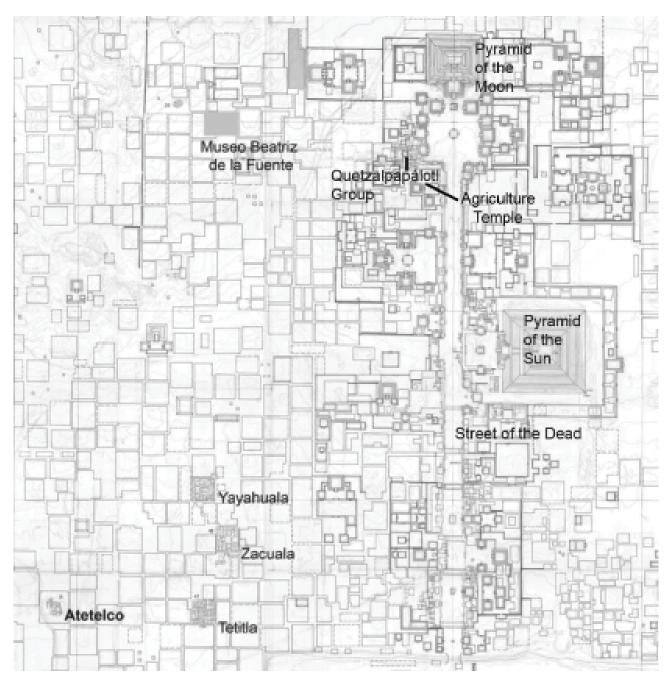
Figure 2.1. A painted scene with landscape and birds, Room 1, North Patio, Atetelco, Teotihuacán. Reproduced with the permission of the Instituto Nacional de Antropología e Historia. Photo taken in Museo de Murales Teotihuacanos Beatriz de la Fuente by Jorge Angulo Villaseñor.

Moon by opening a tunnel in its facade (map 2.1). Such historians as Francisco Javier Clavijero translated the Nahuatl name of the central avenue, *miccaotli*, as Calle de los Muertos, or the Street of the Dead, and early travelers, like Gemelli Carrerri and Alexander von Humboldt, mentioned Teotihuacán (Matos Moctezuma 1995).

More formal archaeological investigations began in 1864, when the first topographic plan of the site was drawn. This was the work of the Scientific Commission of Pachuca, under the direction of Ramón Almaraz. Between 1884 and 1886, Leopoldo Batres began the exploration of the Plaza of the Moon, where the monumental sculpture of Chalchiutlicue was located, and the Temple of Agriculture was excavated. Years later, in preparation for the first centennial of Mexican independence, and with the realization that the Seventeenth International Congress of Americanists would take place in Mexico City in 1910, President Porfirio Díaz approved a project by

Batres to excavate Teotihuacán (Gallegos Ruiz 1997). However, due to the Mexican Revolution, archaeological investigation was suspended throughout the country. It was not until 1917, when Manuel Gamio initiated his project, "The Population of the Teotihuacán Valley," that the first interdisciplinary work of Mexican archaeology developed. In all the sites where Gamio excavated, he established new methods and techniques for reconstruction. Stratigraphic levels and other innovative approaches to investigation were used in the explorations of the Temple of Quetzalcoatl and the Pyramid of the Sun, where Alfred Kroeber excavated a tunnel that ran from west to east, to the center of the structure. From 1933 to 1935, Eduardo Noguera and José Pérez dug a tunnel from east to west that joined the previous one (Gallegos Ruiz 1997, 454–57).

Also in 1933, and again in 1942, Sigwald Linne, of the Ethnological Museum of Sweden, excavated the



Map 2.1. Teotihuacán, focused on the central area, with apartment compounds. Modified from Millon 1973.

neighborhoods of Tlamimilolpa and Xolalpan, where he found residential compounds. In 1939 Alfonso Caso and José Pérez reexplored La Ciudadela (the Citadel). Excavating test pits at the base of the Temple of Quetzalcoatl, they recovered "objects of jade, jadeite, shell, bone, and obsidian pieces representing serpents, as well as small anthropomorphic figures." Rubín de la Borbolla (1947) discovered two important burials with rich offerings in the same place. While exploring

Tepantitla in 1942, Pedro Armillas and José Pérez found the mural painting interpreted by Alfonso Caso (1942) as El Tlalocan. During the same period of excavations, with funds from the Viking Foundation, Armillas exposed a floor covered with mica in an interior court of another compound along the Street of the Dead. In 1944, immediately after the discoveries of Tepantitla and the Viking Group, Armillas and Carlos Margain explored a large sector of Tetitla, where a complete mural—now at

Dumbarton Oaks (Miller 1973, fig. 317)—had been removed by looters. At Atetelco between 1945 and 1947, both archaeologists studied three structures surrounding Patio 1, later named the Patio Blanco by Agustín Villagra. Several murals in various tones of red, with representations of warriors wearing costumes of coyotes and jaguars, were found in reasonably good condition. Multiple fragments of these murals were carefully recovered by Villagra and Santos Villasánchez, who meticulously plastered some of these pieces into the reconstructed walls of the porticoes and rooms of the Patio Blanco. Expanding their explorations, they found the feature now known as the Patio Pintado.

During the 1960s, a large project directed by Ignacio Bernal (1963) discovered and restored the monumental architecture of the pyramids, while further explorations were carried out by many other archaeologists. Between 1962 and 1964, Jorge Acosta, Ponciano Salazar, and Florencia Müller centered their investigations on the north portion of the Street of the Dead, from the Pyramid of the Moon to an area slightly to the south of the Pyramid of the Sun. The Palace of Quetzalpapalotl with its substructure named the Caracoles Emplumados (Plumed Shells) was explored and reconstructed by Jorge Acosta (1964). The mural paintings and stone pillars there were restored by Tomas Zurian, who also worked on many other structures along the Street of the Dead, including the Temple of the Mythological Animals. At the same time, Román Piña Chan (1963) conducted explorations in various parts of the great metropolis.⁷ Parallel to these excavations, William Sanders, Jeffrey Parsons, and Robert Santley (1979) led the project "The Basin of Mexico." About the same time, René Millon (1973), assisted by a group of scholars, directed "The Teotihuacán Mapping Project," which was to determine the geographic extent of the urban area. This effort utilized topographic and aerial photography, complemented by stratigraphic pits that established the chronological sequence of various levels. The result was a detailed map of the city and the surrounding area that even today is an indispensable tool for any archaeological investigation.

To the west of the Pyramid of the Sun, Laurette Séjourné (1962, 150) explored and partially consolidated five large sets of structures that had been intensely plundered over the previous twenty or more years. During her excavations of the buildings that she called "the palace area," she discovered many painted walls. She additionally provided a considerable amount of new information about the social, political, and religious activities of the

ancient residents of Teotihuacán (Séjourné 1966, 164). Following later systematic explorations, the name "the palace area" has been replaced by "apartment compounds," as proposed by Millon (1973).

During the 1980s, Evelyn Rattray explored the Hacienda Metepec (1980) and Linda Manzanilla excavated Cuanalan (1985). When a concession, located at the south of La Ciudadela, was granted to the Hotel Villas Arqueológicas, Eduardo Matos and Carmen Carvajal explored and consolidated part of the remains of a "habitational structure," as José Ignacio Sánchez Alaniz (1989, 13–27) relates. In that decade, methodologies that had previously been applied only occasionally became part of systematic archaeological investigations in which the assistance of specialized laboratories in all related disciplines increased the understanding of the paleoenvironments. The inclusion of sister disciplines built more integrated anthropological knowledge.

At the beginning of the 1980s, the Consejo de Arqueología recommended only maintenance and conservation of the archaeological zone, and the Instituto Nacional de Antropología e Historia (INAH) commissioned Rubén Cabrera Castro, Ignacio Rodriguez, and Noel Morelos to direct the project. However, they decided to include plans for investigation and elected Rubén Cabrera Castro to be director of the project. Many other archaeologists also explored new areas to obtain more information on the Teotihuacán society (Cabrera Castro and Morelos 1982, 9). As a part of the "Special Projects, 1992-1994," which were formulated by the Mexican president at the time, Eduardo Matos Moctezuma created the Centro de Estudios Teotihuacanos to coordinate research and exploration projects inside and outside the archaeological zone. The administration of INAH designated spaces for malls, restaurants, and shops and even a large area for a bullring. Nevertheless, because previous archaeological trenches in La Ventilla had discovered several structural compounds that needed to be explored and consolidated, the community of archeologists rejected the commercial centers and pressured the establishment to change the presidential project.

Between 1994 and 1995, explorations at La Ventilla were divided into four sections in which offerings, burials, and many lithic and ceramic remains were found, as well as mural paintings with representations of diverse types of aquatic, zoomorphic, and phytomorphic elements. The archaeological remains of the structures with different iconographic designs convinced the authorities to permit extensive excavations, which were conducted

by Cabrera (from 1995) and by Gómez Chávez (from 2000). During their nearly five years of excavations at La Ventilla, Sergio Gómez Chávez and Julie Gazzola registered and studied each individual archaeological piece in its own environment.

Correlating the archaeological materials with the households of the apartment compounds, Gómez Chávez arrived at the conclusion that each one had a specific function in a social and economic unit within that part of the urban area. The debris in one of the four apartment units revealed that one or more families lived in and used sections of this compound as different types of workshops. Two of the others were composed of residences with sections of rooms where assistants or servants shared smaller places. In another of the four compounds, the residential spaces were larger and more decorated with mural paintings, which were distributed around a large structure that seems to have been a temple, according to the iconographic motifs that were painted on the walls. This evidence contradicts the previous idea that all apartment compounds were palatial residences of the dominant social elite and that the artisans and regular workers lived somewhere outside the city.

Gómez Chávez (2000) concluded that the four apartment compounds formed a neighborhood, or barrio, in which one functioned as the political administrative center. The second was a religious center with a neighborhood temple, while the third was an elite apartment compound. The fourth was a social and economic compound with workshops. The tools and other utensils recovered from the excavation indicate that ceramics, lithic implements, leather, and other goods were produced there. This fact supports the conclusion that Teotihuacán was a true metropolis.

Integrating Iconographic Interpretation with Anthropology

In the past many researchers, both art historians and archaeologists, have relied on limited, narrowly focused investigations. For this reason their conclusions, anchored only in isolated analyses of what the pictographic elements suggested, were based on similar appearances of contemporary images or on comparisons drawn by others from different cultures. However, no isolated archaeological component can contain complete evidence in support of any theory. Considering the enormous amounts of ceramics, sculptures, incomplete mural paintings, and iconographic materials that lack

important chronological and contextual information, it becomes obvious that many of these interpretations have to be taken as simple lucubration. In order to understand the hidden messages that the residents of Teotihuacán communicated through their pictographic writing in different materials, one must determine the economic, political, social, and religious functions that each apartment compound played and the role it had in the local neighborhood, as well as in the whole urban context of the great city.

The approach presented here does not rely on iconographic interpretation that stands alone. In the particular case of the mural paintings, it is necessary to consider the architectural distribution of other murals in the subgroups that form a complete internal unit. At Atetelco and other dwelling places, this unit is composed of a central patio surrounded by three or more porticoes in front of a principal room for residence (depending on size). In some cases, one or two hallways connect this unit with others to form sections of apartment compounds.

The most important requisite of the integrated anthropological method is the study of all archaeological material found in each room. Unfortunately, we could not include such a complete analysis in the present investigation because the debris of the fallen structure—materials from the burials, offerings, and other remains that always provide a vision of the natural and urban environment—was not recorded during the excavations. With these missing elements, we would have been able to place the architecture in the social, political, and religious context of its period. Nevertheless, we provide a partial context through a review of all the functions attributed to the previously explored apartment compounds in this part of the urban area and a visit to the related mountains nearby.

We further rely on the ethnohistorical study of Mexica dwellings by Marc Thouvenot (2005, 92–113), who draws comparisons with the architectural patterns of the apartment compounds of Teotihuacán. The distributions of the spaces in the latter resemble those of the Mexica aristocracy and their administrative houses, where they conducted civic and religious activities, and the Teotihuacán spaces may also have served these purposes (as Angulo Villaseñor 2007, 91–101 also notes). Thouvenot (2005) mentions Silvia Garza's conclusion that the iconographic symbol for *calli* can represent not only a single house, but also a group of houses, a compound, a town, and even a city. The interior distribution of space in the Teotihuacán apartment compounds seems equivalent to the unit of

the house or calli, which was composed of a courtyard or patio (ithualli), surrounded by porticoes, each of which was placed in front of a large chamber that occasionally had two or three rooms behind it. It is clear that in some cases, hallways and other small rooms complemented the structural unit of the patio with porticoes and chambers. The partially independent units that constitute the patios or ithual-calli at Teotihuacán integrate the internal distribution of the apartment compounds.8 This would be equivalent to a cem ithual tin or the cen-cal(li)-tin of the Mexica.9 The urban distribution that Thouvenot found among the Mexica seems to have similarities with the discoveries made by Gómez Chávez in the four compounds of La Ventilla. 10 In summary, we can say that the careful analysis of the materials recovered systematically in the excavations of the four apartment compounds of La Ventilla revealed the roles of the calli (or habitation units), the minicompounds, and the apartment compounds, as well as the roles they played in what is now considered a neighborhood (barrio).

POLITICAL AND ECONOMIC IMPORTANCE OF THE SIERRA DE LAS NAVAJAS

The Sierra de las Navajas is a mountain formation located in the south-southeast part of the state of Hidalgo, near the central plateau of Mexico. It divides the watershed of the Meztitlan River (known as the Valley of Tulancingo) from the Basin of Mexico. As the sierra is part of the Sierra de Pachuca, it is mainly composed of rhyolitic domes or deposits of obsidian blocks in several tones of green, with varying degrees of transparency, that are immersed among caps of ash. The occupants of Teotihuacán and the Aztecs obtained obsidian from the stones lying on the surface of the mountain or by mining horizontal and vertical holes up to 12 m deep. Remains of several workshops for shaping the stones were found at different altitudes of the sierra and other nearby places. Workers there reduced the obsidian into cores or other preliminary forms to facilitate their transportation, as Alejandro Pastrana Cruz (1997) reports. Outcrops in Cruz del Milagro, Barranca de Izatlan, and El Durazno provided the general source of the obsidian, although some was extracted from deep mines or, to a lesser degree, by excavation of open quarries.

The site was visited by Alexander von Humboldt (1966), who wrote that for the working of the obsidian (*itztli*) great works were undertaken of which one can still see

remnants in the immense number of wells that are found between the mines of Moran and the village of El Grande, both in the mountains of the El Oyamel and El Jacal [sic] region. The Spanish named this area El Cerro de las Navajas. Pastrana Cruz (2007, 38–39) mentions that the hill is the most exploited deposit in Mesoamerica because the Teotihuacán residents, the Toltecs, and the Aztecs mined the area. The Spanish continued obsidian extraction at the site during the viceroyalty, and it is used even today.

Many archaeologists regard the obsidian industry as one of the main factors that created and enriched Teotihuacán. It supported the military and commercial power that the settlement established in the Central Highlands before spreading its supremacy to other Mesoamerican areas (Spence 1967). According to Robert Drennan, Philip T. Fitzgibbons, and Heinz Dehn (1990, 196), "There are indications that goods were imported and exported in quantities that required significant expenditure of human effort." Santley (1984, 59-80) held the opinion that the power of Teotihuacán developed during the Classic period, due, among others reasons, to the stratified society's control of the trade and exchange of obsidian products. Previous interpretations of the mural painting in Room 1 of the Patio Norte, made by Jorge Angulo Villaseñor (2007), Jesper Nielsen and Christophe Helmke (2008), and probably others, assumed that its representation of the Sierra de las Navajas was a pictographic statement. This view, that the sierra was a feudal area controlled by warriors headquartered at Atetelco, is one that we challenge in the present study.

THE PROBABLE ADMINISTRATIVE HEADQUARTERS OF THE OBSIDIAN PRODUCERS IN TEOTIHUACÁN

In the urban area of Teotihuacán, Atetelco is one of the apartment compounds located nearly 300 m west of the Pyramid of the Sun.¹¹ It was first reexplored by Séjourné until 1980, when Rubén Cabrera replaced her (Giral Sancho 2001, 22). During that time of administrative changes in INAH, some mural paintings from Atetelco and other apartment compounds explored by Séjourné were removed and deposited in the ceramics storeroom of the archaeological zone.¹² The restorer Santos Villasánchez, who was a highly accurate assistant to the painter Agustín Villagra, carefully rescued and protected some murals and fragments in the partially explored patios of the Atetelco compound. He and the members of



Figure 2.2. Eagle warriors appear on the wall of the Patio Blanco, and coyotes and felines are on the sloping surface at its base, Atetelco, Teotihuacán. Photo by América Malbrán Porto, reproduced with the permission of the Instituto Nacional de Antropología e Historia.

his work crew assembled thousands of fragments of the wall paintings and placed the others in cardboard boxes with labels indicating the room or portico number where they were found. The murals were then stored in this and other storerooms and forgotten for more than twenty years, until the director of the Centro de Investigaciones Teotihuacanas, María Elena Ruiz Gallut (1998–2003), rediscovered several of them. The mural that is the subject of the present chapter was among them.

From the moment that the Patio Blanco in Atetelco was discovered and its mural paintings restored, the construction was regarded as the headquarters of three military corps because the walls were painted with anthropomorphic figures who hold shields and arrows in their hands and wear three different types of zoomorphic outfits as war emblems. The restoration led to the belief that the Patio Blanco and the rest of Atetelco were for the exclusive use of the three military brigades represented by coyote, feline, and eagle attire (fig. 2.2). This view, that Atetelco was the central headquarters of the militia the Teotihuacán government used to expand its political and commercial power over Mesoamerica, has been repeated

many times over the years. Several authors continue to enrich the theory, utilizing different iconographic examples found in murals and on ceramic vessels and figurines. Many scholars have operated under the assumption that the function of each apartment compound can be deciphered through the interpretation of the messages on its painted walls, which has resulted in various theories to explain aspects of the social, political, and religious conduct, including the changes that occurred throughout the compound's archaeological and historical development (Caso 1942; Séjourné 1956; Angulo Villaseñor 1964, 1972; Von Winning 1987).

INTERPRETATION OF THE PAINTING IN ROOM 1 OF THE PATIO NORTE

The Political Place of Átetelco and Other Residential Groups at Teotihuacán

It is impossible to know if the Atetelco compound was part of a neighborhood because the present expansion of the modern town does not permit a close comparison





Figure 2.3. Cactus motifs (biznagas) painted on a construction that postdates the nearby Patio Blanco, southwest corner of the Patio Norte, Atetelco, Teotihuacán. Photo by América Malbrán Porto, reproduced with the permission of the Instituto Nacional de Antropología e Historia. Drawing by Francisco Villaseñor Bello (Cabrera Castro 1995, plate 44). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

with the apartment compounds explored in La Ventilla. We now think that it was a large temple for a neighborhood where the captains of at least three different military units had their headquarters. Restricting our observations to the union of these three or more military branches in the Atetelco compound, and bearing in mind the earlier idea that Atetelco was the principle military headquarters of Teotihuacán, we focus on the Patio Norte.¹³

The mural paintings of the Patio Norte unit cannot be related to archaeological materials found during excavation of the immediate area, the optimal standard for analysis as discussed in the methodology section of this chapter. Unfortunately, no information has been published, nor have relevant facts been preserved in the INAH archives. We can only suggest that the smaller rooms located at the northern part of the Patio Norte were probably occupied by families in service to the warriors because these rooms and hallways have stucco walls with no trace of mural paintings. In contrast, the porticoes in the Patio Blanco and larger rooms with porticoes in the Patio Norte contained iconographic scenes related to military activities, which suggests that these patios might have been centers where the captains of squadrons organized rituals and ceremonial festivities pertaining to war.

The Chronology of the Patio Norte in Relation to Other Patios at Atetelco

As it has not been possible to consider more detailed information concerning explorations made during the 1960s or before, only the architectural remains (floors and walls) can be utilized to establish the development of the structural superpositions. With this understanding, however, we have been better able to comprehend how the mural paintings are related and how they functioned in each of the three patios that are now known in the Atetelco apartment compound. The unit experienced overlapping structural modifications over the centuries that make it difficult to confirm whether it, like most apartment compounds in Teotihuacán, maintained the pattern established in its interiors. This is partially indicated by the three patios with porticoes that have now been exposed by excavations.

In reanalyzing the superposition and distribution of rooms in the Patio Norte, we realized that it was constructed at a later date over a structure that was contemporary with the Patio Blanco. The open trench left by the excavations in the floor, at the southwest end of the Patio Norte, confirms this interpretation. The trench reveals depictions of the round cactuses (*biznagas*) that were painted during an early stage on a wall that goes down (at the north) to the floor level of the Patio Blanco

(fig. 2.3). The latter is precisely where images of warriors wearing different zoomorphic costumes were painted on the basal slopes and vertical walls of the two reconstructed porticoes, which provides iconographic support for the idea that the founders considered it to be a military center. Evidence suggests that the Patio Blanco is the oldest structure built in that compound, as two sets of three steps, placed to the southeast of this patio, connect it with the west entrance of the Patio Pintado. Apparently, these patios (and probably others not yet explored) were remodeled during the late part of the Xolalpan period (AD 550-650), when the Patio Norte was built over the earlier structure to fulfill a sociopolitical demand not presently discernible. Nevertheless, the three patios found in Atetelco seem to be the place where the military branches had their headquarters from the late Tlamimilopa period (AD 350-450) to the end of the late Xolalpan period (AD 550-650), and probably until the Metepec period (AD 650-700). Then they were abandoned and destroyed.

The North Patio: The Architectural Setting of the Sierra de las Navajas Motif

The northwestern area of the group of rooms around the Patio Norte has suffered extensive damage over the years. Without excavation, it is difficult to determine whether Portico-Room 3 (west of the Patio Norte) is related to a destroyed and reconstructed Room 3, where a warehouse was installed in the middle of the twentieth century to store material from the Patio Blanco (map 2.2). Portico and Room 4, as marked on the topographic drawing, were damaged and almost destroyed by the reuse of their stone to build the previously mentioned dam, or *atetelco* (see note 11), and a street in the town that runs from northeast to southwest (angling across the upper left corner of map 2.2). ¹⁵ One wall of Room 3 has another opening toward Portico 2, which provided access to the Patio Norte.

Portico 2, which is nearly 3 m deep, has an entrance to Room 2 (at the north) and another access route toward the east that connects it with a hallway that runs toward the north and to a large room. The hall has one opening to Room 2 and, on the east, a second open space that leads to a room that is not numbered on our drawing. Although all these rooms and hallways on the eastern side of the compound have walls covered by stucco, no traces of mural paintings have been found to date.

Present access to the Patio Norte requires jumping over the low remnants of destroyed walls that separate the Patio Pintado from one or two apartment compounds at the north. As no doorways linking the earlier Patio Blanco and Patio Pintado to the later Patio Norte have been found, it seems that the original entrance to this unit must have been in the extreme northwest of the compound. Since the other structures at the extreme northeast of the same apartment compound are still being explored and restored, nothing further can be said, except that it is evident that this area has been destroyed over time by erosion, looting, and the continuing rural and urban development, including dam and street construction, among many other things. Although multiple alterations were made during the structural reconstructions at Atetelco, especially in the Patio Norte, its internal distribution seems to follow the general prototype of the Teotihuacán apartment compound. This architectural pattern is formed by a patio surrounded by three or four residential units, with porticoes preceding rooms that usually are of two sizes.

The Probable Staging of Rituals in the Patio

Once the internal composition of these units or patios with their respective flanking rooms is understood, it will be easy to find the logical circulation used during the ceremonies performed in this theatrical arena. At present, the badly damaged pictographic remnants are the only indicators of the activities that might have taken place in an apparently isolated part of the Patio Norte (the corner that lies north of Room 3 and west of Room 2). Our information comes from two fragments of murals in the lower part of the space, where two anthropomorphic figures, described by Cabrera Castro (1995, 256) as having Maya profiles, are depicted in front of a large vessel (fig. 2.4). It is difficult to decide if these figures, which have previously been identified as foreigners, were waiting to participate in ceremonial activities or if they were Maya visitors painted on the wall of the now-destroyed space.

Passing through the opening toward the south, one enters Room 3, which contains five badly eroded murals with images that are very difficult to see. From the careful observations of Francisco Villaseñor (in Cabrera Castro 1995, 243, 255), we have been able to reconstruct, from portrayals of the same motif in five places, the form of a shield composed of three concentric circles in different tones of red, with three floppy tails of coyote pups hanging from their centers. A vertical panel with elongated



Map 2.2. A plan of the Patio Norte, superimposed on earlier Patios 1 and 2, Atetelco, Teotihuacán. Modified from drawing by G. Ramirez (Cabrera Castro 1995, map 18.1).

hexagonal patterns frames the ceremonial shields (fig. 2.5). The images are not obviously related to those in the room described previously, and the repetition of the motif leads one to think that this may have been an area where coyote clan members stored their ceremonial shields before participating in festivities that are described in the following paragraphs.

An open space to the east, apparently a door, connects Room 3 with Portico 2, which is almost 3 m wide and has access to the front of Room 2.¹⁶ Portico 2 has four mural paintings, found on the lateral walls and the entrance to

Room 2. The theme of this area is a long, counterclockwise procession of warriors (fig. 2.6).¹⁷ Each figure is fully ornamented and holds long darts wrapped in soft pieces of leather that include fluffy tails from young coyotes. Each of these assemblies is seemingly held in a glove-like paw with claws. The costumes also include leggings decorated with twisted bands that are widely recognized as a symbol of the jaguar lineage. The bunches of arrows and other warlike utensils, as well as the coyote pup tails in the glove-claw, indicate the affiliation of two zoomorphic military units, the coyote and feline warriors. This relationship





Figure 2.4. Seated figures with Maya facial features, Room 4, Patio Norte, Atetelco, Teotihuacán. Photo by Beatriz de la Fuente (Cabrera Castro 1995, plate 61), reproduced with the permission of the Instituto Nacional de Antropología e Historia. Drawing by Francisco Villaseñor Bello (Cabrera Castro 1995, plate 69). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

might be explained by joint participation in festivities in this headquarters, and the association is repeated in a mural painting in Patio Blanco, Portico 3 (fig. 2.7).

Two square pillars that support the roof between Portico 2 and the open Patio Norte (20 cm below the level of the portico) have remains of mural paintings that resemble bleeding shields (fig. 2.8). They feature the remains of two concentric circles in two sizes that are painted in different shades of red. These are similar to the circular designs in Room 3, but instead of including coyote-pup tails, they show an arrowpoint from which long lines of blood drip downward. The murals probably indicate

that blood sacrifices were performed at this patio after a procession of young warriors around Portico 2 and may record a part of the ceremony in which the precious liquid was dripped over ornamented ritual shields and arrows, perhaps as a form of sympathetic magic favored in different types of ceremonial interventions, especially those related to the initiation of warriors.

On the west side of the Patio Norte (in the space labeled Porch [Portico] 3 in map 2.2) are three fragments of mural paintings. Like the other images in this compound, these are difficult to interpret because they have been almost destroyed by heavy erosion. The murals in

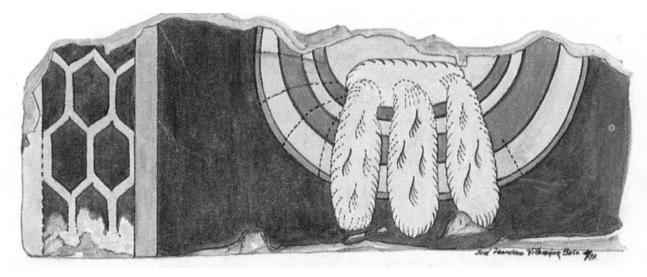


Figure 2.5. A shield motif with attached coyote tails, Room 3, Patio Norte, Atetelco, Teotihuacán. Drawing by Francisco Villaseñor Bello (Cabrera Castro 1995, plate 60). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

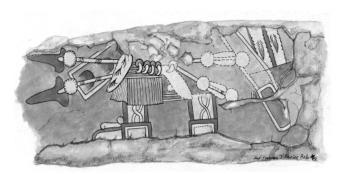




Figure 2.6. Warrior figures, Portico 2, Patio Norte, Atetelco, Teotihuacán. Drawings by Francisco Villaseñor Bello (Cabrera Castro 1995, plates 53 and 54). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

this large portico-room show different types of ornamented shields, and the larger one seems to have a square form with rounded corners framed with long feathers (fig. 2.9). Its interior contains five-pointed-star symbols. Behind it, a smaller round shield ornamented by a row of short feathers covers the top of another row of longer feathers that hangs downward. These shields seem to rest on a long base that is apparently made of finely woven reed basketry. This base is covered by a long blanket that, according to the painting conventions of Teotihuacán, can be identified as cotton. The repetition of ornamented shields in Room 3 and in Portico-Room 3 suggests that these spaces would have been reserved for ethnic branches or military groups, as places where they stored their shields for participation in special ceremonies.

Crossing the Patio Norte toward the east, one faces the entrance to Portico 1, where, after the usual two pilasters

that flank the entrance, the walls are covered by figures of two wolf-covotes seated on large shallow basins that are in turn supported by pedestals (fig. 2.10). Apparently, this vessel or altar was made of small obsidian chips and long spiky, triangular stems of a succulent plant classified as Heliocereus sp. This plant from semiarid areas is related to the Cactaceae family. The iconographic elements at both sides of the altar-thrones or pedestals of the wolf-coyotes consist of two large knives with curved points and one small biznaga. Instead of fur, the skins of the wolf-coyotes have feathers, which are delineated in white paint over the classic Teotihuacán red that usually covers the backgrounds of the murals. These plumed coyotes represent the highest rank of this military branch of the Teotihuacán army. Two large sound scrolls that extend from the snout of each wolf-coyote enclose shells and other aquatic elements, while drops of water and



Figure 2.7. Coyote and feline motifs, Patio Blanco, Portico 3, Atetelco, Teotihuacán. Drawing by Agustin Villagra, modified by Jorge Angulo Villaseñor.



Figure 2.8. Probable shields with dripping blood on pillars that support the roof of Portico 2, Patio Norte, Atetelco, Teotihuacán. Drawing by Francisco Villaseñor Bello (Cabrera Castro 1995, plate 56). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

flowers project from their exteriors, representing the sound of a petition, roar, warning, or message that was clearly understood by the warriors.

Moving through the portico and into Room 1, it is possible to see in the lower part of each lateral wall the round bottom of what probably was another type of shield, apparently made of red leather framed by a rim of a curved design that is associated with the symbol of running blood or other precious liquids. These shields are divided by a whitish vertical element that rests on two coils of interwoven basketry, similar to the supports made today by artisans (fig. 2.11).

The Bird Imagery and the Sierra de las Navajas

In order to better interpret the painting from Room 1 that is the primary concern of this investigation, we sought the help of its restorer, Santos Villasánchez, in finding the original position of the mural. He indicated that fragments of it were scattered in the debris located at the center and the extreme north of the east wall. This wall is separated into three segments by two pilasters that probably helped support the heavy roof. It is in the largest chamber of the Patio Norte unit. Thus, the scene must have been the principal and final subject of the

Figure 2.9. Shield forms over a platform with basketry designs, Portico 3, Patio Norte, Atetelco, Teotihuacán. Drawing by Francisco Villaseñor Bello (Cabrera Castro 1995, plate 58). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

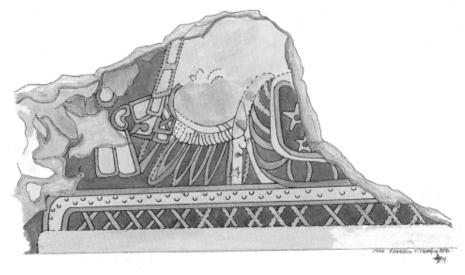






Figure 2.10. A wolf-coyote seated on a pedestal, Portico 1, Patio Norte, Atetelco, Teotihuacán. Drawings by Francisco Villaseñor Bello (Cabrera Castro 1995, fig. 18.19 and plate 48). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

ceremonies performed in the most important room of this Atetelco patio unit.

Study of the mural shows that one of its motifs is the picturesque landscape of the Sierra de las Navajas (fig. 2.12). This interpretation is easily established by a visit to the nearby mountainous site, where the Teotihuacán residents and subsequent groups obtained obsidian cores to be transformed into long knives, blades, and other utilitarian and sacred objects. Among other details of the painted scene are a wide variety of xerophytes, including *nopales* (*Opuntia* sp.), maguey (Agavaceae), biznaga, and *cardón* or *pitaya del cerro* (*Heliocereus* sp.), and other types of vegetation typical of the Sierra de las Navajas and the arid environment that is characteristic of the northern areas of Mexico. Most of

these plants were also depicted in the previously mentioned painting at Tepantitla known as *El Tlalocan* (Angulo Villaseñor 1964, 1995).¹⁸

The reassembled fragments of this mural show a large, repeating design that encloses the image of a bird of prey rising from a nest that rests on a shallow, basin-like form. The placement of the bird and its associated elements within the outline of the largest mountain resembles an *altepetl* symbol, a convention followed by later (Postclassic) groups in representing settlements. Over the winding profile of the mural, curved obsidian knives spring up from the surface of the sierra. We obtained further information on the condition of the mural from Villasánchez, who restored and assembled the fragments. He emphasized that most of the pieces



Figure 2.11. A partially destroyed shield motif resting on a basketry support, Room 1, Patio Norte, Atetelco, Teotihuacán. Photo by Beatriz de la Fuente (Cabrera Castro 1995, plate 46), reproduced with the permission of the Instituto Nacional de Antropología e Historia.



Figure 2.12. A comparison of landscape profiles: the Sierra de las Navajas near Teotihuacán and mural painting in Room 1, Patio Norte, Atetelco, Teotihuacán, interpreted as the Sierra de las Navajas. Photo by Jorge Angulo Villaseñor, images superimposed by América Malbrán Porto.

did not fit precisely because their edges had naturally suffered deterioration during the constant removal of debris. What he found more disconcerting was that in the only place in which a fragment of the vertical wall connects the *talud* (sloping panel) with the images of the mural under study, these motifs were painted upside down. ¹⁹ Why the Teotihuacán artist painted this section of the wall and talud in such a way is a mystery. ²⁰ After Villasánchez reassembled the fragments, Francisco Villaseñor made a drawing that shows the reconstruction of the entire painting (fig. 2.13).

The foundation for our interpretation of the Sierra de las Navajas mural has been the iconographic identification of the individual painted motifs in its immediate vicinity. The investigation is clearly unfinished because the damaged images limit a complete conception of how these units originally functioned. After virtually placing the reconstructed mural on its corresponding wall of Room 1, however, we have condensed our analysis of the motifs into four sections that lead to further observations:

- 1. The two birds of prey shown in profile stand on platforms that have exactly the same characteristics as the altar or pedestal for the wolf-coyote in Portico 1. This platform may signal status.
- 2. Figures similar to these birds of prey that are found in different compounds (fig. 2.14) have been

- identified as representations of owls by Noguera (1925); quetzal birds by Séjourné (1957); quetzal-papalotl, or quetzal-butterflies, by Acosta (1964); and ospreys (fishing hawks) by Angulo Villaseñor (1964, 1972), who subsequently considered this falcon-like form to be a representation of a group of warriors (Angulo Villaseñor 1995). Finally, the ornithologist Lourdes Navarijo Ornelas (1995) identified this figure as the eagle, *Spizaetus tyrannus*.
- 3. The painted motifs in the frame that encloses the birds of prey include motifs of disarticulated coyote legs that interrupt two interlaced bands. The assembly forms the long body of a serpent with the same pattern that frames the talud in Portico 2 of the Patio Blanco. One of these bands includes pieces of *Heliocereus* and other plants from arid regions, while the other band that composes the serpent body includes various types of shells and other aquatic elements.
- 4. The head of the serpent drips water symbols, and its tail ends in an element that seem to be a long piece of leather. Nearby, we see an isolated, uncultivated grass that grows during the dry season. These elements that correspond to arid environments only appear during the late style of Xolalpan mural painting and last until the Metepec period.

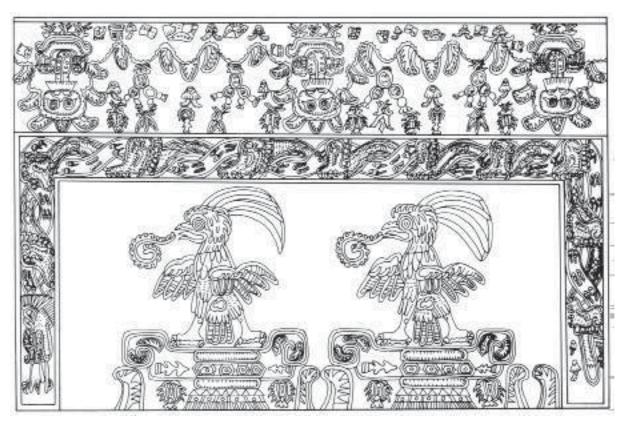


Figure 2.13. Reconstruction of talud and wall, Room 1, Patio Norte, Atetelco, Teotihuacán. Drawing by Francisco Villaseñor Bello (Cabrera Castro 1995, fig. 18.18). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

The upper part of the reconstructed mural with the inverted images requires special consideration. As noted, the three birds of prey that are framed by the mountainlike forms are shown in nests. Perhaps this indicates that these mountains, which provided raw materials to enrich the Teotihuacán people, and the birds that lived in them were protected by a select detachment of warriors. It is possible that they nursed, raised, and sheltered the birds because they were seen as emblems of their identities as warriors. It seems clear that these birds, whether they be owls, eagles, or falcons, were in constant flight over the Sierra de las Navajas and are likely to have been regarded as living symbols of young warriors. In addition to the fact that they are shown in their nests, the youth of the birds is indicated by the small feathers on their chests and their lack of claws, which would have made them good symbols of the fledgling warriors. This painted interpretation differentiates the juveniles from the adult birds of prey, which are proudly shown with shields and other items symbolizing their military affiliation and hierarchical level. This early, specialized group of warriors undoubtedly had detached rooms in many of the apartment compounds distributed around the great city, as the warrior-birds can be seen in mural paintings in the compounds of Quetzalpapalotl, La Agricultura, Tetitla, and the Patio Blanco of Atetelco. They also appear on ceramic vessels and other ornamental items as vestments or armatures with shields and arrows held by human hands (fig. 2.15).²¹

The Possible Function of the Patio Norte in Comparison with Other Atetelco Patios

With the premise that the painted motifs in the Patio Norte present a theme that is developed as a particular sequence, we think it logical that the remaining patios should also provide one or several unified messages that help define the function of those apartment compounds. The difficulty in pursuing this idea has been the archaeological superimpositions and the careless restoration of original spaces, as well as the intrusion of modern structures that have destroyed characteristics of the ancient buildings. However, with adequate time to

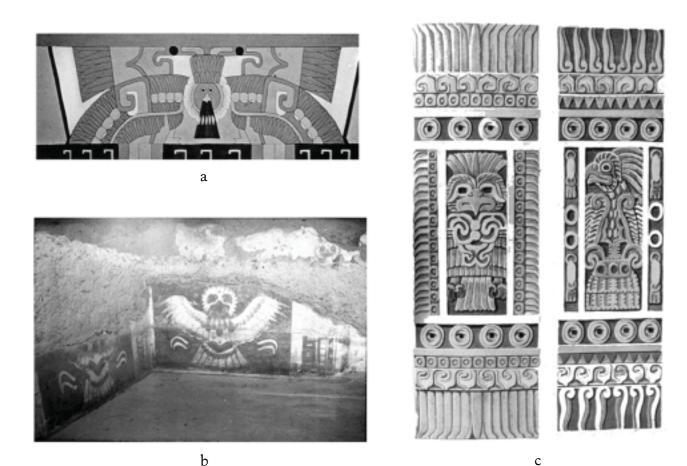


Figure 2.14. Birds of prey in Teotihuacán paintings: (a) destroyed mural in the Temple of Agriculture, after Gamio 1922; (b) Tetitla, photo by Jorge Angulo Villaseñor, reproduced with the permission of the Instituto Nacional de Antropología e Historia; (c) reconstructed motifs on pillars, Palace of Quetzalpapálotl, after Acosta 1964.

observe, study, and compare the structural designs of other apartment compounds, and to consider the chronological changes they might have experienced, we may gain a more accurate vision of their social, architectural, and pictographic significance.²²

The first phase of our analysis is to recall and integrate all the iconographic motifs found in each of the rooms, with or without porticoes, that are thought to form a single section of the compound. This section must be related to the social and structural unit and to the other patios in the Atetelco compound. Several singular factors connect the military units represented by different zoomorphic emblems. These groups might have utilized specific patios to execute rituals of initiation, rites of blood sacrifice, and other specialized festivities. The strongest confirmation of this idea lies in the pictographic message painted on the talud of the Patio Blanco, Portico 3, where

two elegantly dressed warrior-priests of Tlaloc (identified by goggles or *anteojeras*) wear complicated headdresses with long feathers. These headdresses also include small obsidian knives that resemble the symbol of the year. The scene illustrates a complicated ritual dance, as the background is a large rectangular platform covered with footprints. Rendered in flattened form as a border, we also see five stairways, and the tablero of the platform that is decorated with *chalchihuitl*, a symbol of water (fig. 2.16). Obviously, these priests of Tlaloc were performing a ritual dance that included the offering of two hearts as part of a sacrificial ceremony to bring rain to the arid area. In their right hands, the Tlaloc figures hold large obsidian knives with bleeding hearts on their tips; in their left hands, they hold three darts wrapped in cloth.

Along the top and side of the talud, five Tlaloc heads seem to watch the complicated dance of the



Figure 2.15. Bird of prey from a broken ceramic vessel, Teotihuacán. After Von Winning 1987, 1:89, fig. 9c.

warrior-priests. A band of curved knives along the top of the upper row and two interwoven bands complete the design on the talud. One of the bands contains pieces of Heliocereus, while the other carries a design of seeds or inaccurately painted conch shells. The shape of the platform represented on the talud of the Patio Blanco indicates this ceremonial dance was performed outside the compound of Atetelco, where the military and priests danced in open spaces for public festivities having to do with sacrifice and war. As a prelude to future investigation, we note that among the three military groups represented in Atetelco, feline figures appear in the Patio Blanco along with the coyote nahual, or symbol of this type of military unit. The bird symbol scarcely appears as a guest or in a second warrior position. However, in the Patio Norte the bird figure predominates, while the coyote and feline figures seem to be cordial visitors. These observations might indicate that the division of space in the apartment compound of Atetelco created residences around patios for each of the warrior divisions represented by zoomorphic garments.

In summary, the largest patio with pictographic information, the Patio Pintado (or Patio 2), probably was an amphitheater for the most important war-related events, while the Patio Norte (or Patio 3), where the significant mural was painted in one of the urban houses

(calli), was most likely the house of bird warriors who were in charge of the custody, extraction, and administration of obsidian in the Sierra de las Navajas and oversight of bird nests there.

CONCLUSIONS

In this study we have emphasized the importance of examining iconographic elements in murals and other sources: a multidisciplinary method of integrated anthropology, which is also concerned with the identification of motifs, but has the advantage of considering the physical environment as well as the chronological and cultural context in which the forms were created. This approach is applied to our interpretation of the mural paintings at Atetelco. In this architectural complex at Teotihuacán, we based our opinions on all the archaeologically known cultural components there.

The theory established during the 1940s was that Atetelco was a military center in which three or more types of warriors can be identified on the basis of their zoomorphic garments and emblematic insignias. These earlier discussions by various authors did not indicate the functions performed by the military units related to the wolf-coyote, two types of felines (pumas and jaguars),

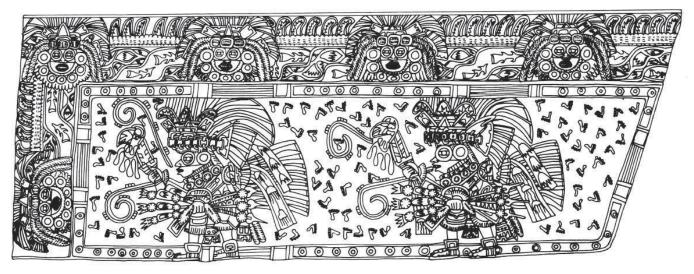


Figure 2.16. A ritual dance performed by warrior priests, Patio Blanco, Portico 3, Atetelco, Teotihuacán. Drawing by Agustin Villagra (Cabrera Castro 1995, fig. 18.7). Courtesy of "La pintura mural prehispánica en México" project, Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México.

and a large variety of birds of prey, classified as falcons, eagles, and owls, as well as quetzals and other birds with Tlaloc symbols (not discussed here). The three military badges that appear in mural paintings throughout the Atetelco compound were probably included because each of these groups had its headquarters located in the Patio Blanco, the Patio Pintado, or the Patio Norte. The assembly of patios occupied by different military groups could have formed one of the most important centers of operation found thus far in the great city of Teotihuacán.

The primary focus of this investigation is a painting in Room 1 of the Patio Norte. Other publications have suggested that this architectural unit was a residence for warriors who constructed their identities around wolf-coyotes and birds of prey. However, the painted motifs that remain in the compound subtly indicate that this area was not only a residence. The iconographic sequence additionally reflects activities that these military groups engaged in during their rituals of initiation. Our investigation suggests that one of the concerns of the warriors linked with the birds of prey was control of the famous obsidian deposits in the nearby Sierra de las Navajas, which produced the arrowheads, knives, and luxury goods that enriched Teotihuacán society. A consideration of the archaeological information along with the iconography of this mural indicates that the group probably not only participated in the military control of the Teotihuacán obsidian resource, but also nurtured and protected the birds of the Sierra de las Navajas that inspired its emblem.

NOTES

- 1. The Patio Blanco is also known as the White Patio, Patio 1, and Patio A.
- Other names for the Patio Pintado, the Painted Patio, are Patio 2 and Patio B. The last two names derive from the order in which the features were discovered.
- 3. The Patio Norte, the North Patio, is also known as Patio 3 and Patio C.
- 4. For the location of Teotihuacán, see maps 1.4a and 1.4b.
- 5. The terms *Mexica* or *Tenochca* refer to the group that settled in Mexico-Tenochtitlán, while *Aztec* is the general name for the entire Nahua group that migrated from the mythical Aztlan.
- Archivo Técnico, Dirección de Arqueología, Instituto Nacional de Antropología e Historia (henceforth INAH), November 12, 1939.
- 7. One of his discoveries was four pieces of engraved stone that were assembled as what is now called La Estela de la Ventilla, a ball court marker.
- 8. In agreement with the recent investigations, people in Teotihuacán apparently spoke a kind of Protonáhuatl-pochuteca (or Proto[Pre]-Náhuatl or Proto-Pochuteca; King, Gómez Chávez, and Gazzola 2004, 214, 237).
- 9. Cen means "unit" or "compound," and caltin is the plural of calli. From Thouvenot it can be assumed that when these structures, similar to the cencaltin of the Mexica, were connected to other cencallitin, either by ethnic or other relationships, they formed a tlaxila-calli (barrio or neighborhood). When a temple, or teucalli, was included in a cencallitin, it automatically became a political

- calpixcayotl. This term can be translated as templo de barrio or mayordomía (temple of a neighborhood or an estate), a term used by the Spanish during the sixteenth century.
- 10. However, these parallels do not prove that the Nahuas established this urban design in the megalopolis during the Xolalpan period (AD 500-650) because this kind of social organization is apparently common among all urban and even pre-urban settlements among smaller and larger towns in the high plateau, even long before the Mexica or any other Nahua group arrived in this extended area.
- 11. Atetelco is a word that was used during colonial times to refer to a small dike made to hold or deflect a small river and a creek that ran near the west corner of the archaeological compound. As Nahuatl is an agglutinating language, the construction A-tetel-co can be divided into several vocal sounds. The initial part, formed by A-(tl) for "water" (eliminating the -tl), is followed by te-tetl for "stone." When it is repeated, as in te-tetl, it means "stone over stone." Adding the locative -co at the end indicates the place where the subject is situated. Thus, the term means a dam or literally, "a determinate place with accumulated stones to retain water."
- 12. The strappo method for transferring mural paintings was employed. This process detaches the painted layer from the substratum by pulling fabric adhered to the surface of the pictorial cap. It can be used only with mural paintings done in the true fresco technique, in which the pigments are applied to wet plaster.
- 13. For previous discussions of Patio Blanco and Patio Pintado, see Villagra 1951; Margain 1966; Miller 1973; and Cabrera Castro 1995, 2002.
- 14. Descriptions and locations of each room and portico in the three patios of Atetelco have previously been provided by Cabrera Castro (1995) and Angulo Villaseñor (2007).
- 15. The space referred to as Room 4 is the unnumbered corner in map 2.2 that is east of Room 2.
- 16. The northern part of Room 2 was damaged by the Atetelco Street. From Portico 2, another space opens to a large, unexplored room that forms part of the eastern side of the whole compound.
- 17. Due to their deteriorated conditions, it is easier to comprehend these images from the reconstruction paintings by Villaseñor than from photographs.
- 18. The twisted roots exposed under the xerophytes also appear in the looted mural paintings from Techinantitla (Berrin 1988).
- 19. The talud stet is typically found at the base of a tablero. The latter is a vertical wall that has deep rectangular molding around its edges.
- 20. There are several references that discuss the diverse forms of perspective that pre-Columbian cultures utilized to express space and distance (Angulo Villaseñor 2015).

- 21. The constant association of this flock of warrior birds with the wolf-coyote motif, which connotes the arid, northern land, may indicate cooperation between the two military units
- 22. Of course, all the messages were quite clear to the occupants of Teotihuacán because these expressions of pictographic writing were part of their communication system.

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Chapter Three

Place Names and Political Identities in the Teotihuacán Mural Paintings

Davide Domenici



he elaborately costumed figures portrayed in the Teotihuacán paintings and the motifs that accompany them clearly served to delineate religious, political, and military status at the site. Although their messages are not presented in blocks of hieroglyphic texts, it has become increasingly productive to study these and other paintings at the site as expressions of language. The notion that Teotihuacán imagery reflects a logophonetic communication system has gained strength in the last few years, although some disagree about the extent of its phonetic content and its status as a proper writing system.1 Even though elements that show a clear structural similarity with those of other Mesoamerican logophonetic systems have been identified, the decipherment of the Teotihuacán writing system faces awesome obstacles. Foremost among these is our ignorance of the languages spoken in the ancient metropolis, which was inhabited by a multiethnic and multilinguistic population.2

The identification of some Teotihuacán signs as glyphs has often rested on their small dimensions and spatial location beside larger figures more than on a clear, formal distinction from other motifs. This apparently slight differentiation between the different levels of communication has had the result that studies devoted to Teotihuacán imagery, especially in mural paintings, shifted between a symbolic approach, based on signs and images (Von Winning 1987), and one aimed at deciphering a

notational system, not necessarily with the intervention of language (Langley 1986, 1991, 1992, 1993, 2002). A third analytical perspective, advocating a proper logophonetic writing system (e.g., Millon 1973; Taube 2000, 2002, 2011), has been largely favored in recent years (e.g., Browder 2005; Colas 2011; Nielsen 2004; Helmke and Nielsen 2011, 2014; Nielsen and Helmke 2008, 2011, 2014).

Facing the problem of the coexistence of different communication levels in the Teotihuacán painting tradition, James Langley (2002, 276) recognized two different registers, stating that notational signs—pertaining to the "province of writing"—are "clearly distinguishable from the pictorial imagery in which they are typically embedded" and that these "distinctions of usage are vital in any attempt to identify the nature and scope of the notational system and in the exploration of its syntax and possible linguistic elements" (see also Langley 1991, 286-87).3 However, the distinction between notational signs, or glyphs, and the pictorial imagery—that, according to Langley, has a "merely iconographic function"—is not so straightforward. Karl Taube (2000, 21-22, 28-29) has shown that pictorial imagery also includes glyph-like signs expressed in a larger graphic form, thus leading to the definition of two different styles in the Teotihuacán writing system: condensed and emblematic.4 The latter is to some extent similar to the full-figure depictions of the Maya writing system. The emblematic motifs of the Teotihuacán mural painting seem to stand in the gray 54 Domenici

zone separating the condensed glyphs from pictorial imagery. In the present work I will concentrate on this gray zone and, stimulated by Taube's work, argue that many images usually interpreted as pictorial imagery should rather be understood as emblematic or full-figure glyphs.

First, I will analyze—mainly on the basis of comparisons with later Náhuatl glyphs—the formal structure of some emblematic glyphic compounds, trying to understand their possible semantic value as toponyms, political titles, and so forth. I will then follow with a discussion of these signs, often "disguised" as realistic, mimetic imagery, and I will consider the relationships among different semantic registers. The final section will be devoted to a preliminary attempt at contextual interpretation that could provide some glimpses of the syntactic organization and sociopolitical function of Teotihuacán texts in mural paintings.

THE FORMAL STRUCTURE OF EMBLEMATIC GLYPH COMPOUNDS

My point of departure is one of the most famous Teotihuacán painting groups (fig. 3.1a), that is, the series of coyotes on the taluds of Portico 1 in the White Patio of Atetelco (Murals 1-4).⁵ In most previous publications (e.g., Cabrera Castro 2002, 140-43), these images have been described as coyotes with feathered headdresses and speech scrolls, whose bodies bear images of shields. The presence of the shields, together with the representations of warriors on the corresponding tablero, influenced scholars to interpret the coyotes as realistic images imbued with martial symbolism (e.g., Headrick 2007, 96; Cabrera Castro 2011, 7). Nevertheless, various authors observed that the circular sign with inner oblique bands is probably a notational sign (n. 11, Bars transverse, in Langley's original catalog [1986, 233-34] and n. 13 in the revised version [2002, 299]). Clara Millon tentatively assigned it "a glyphic significance" (Hall 1962, 325) and in a subsequent publication qualified it as an "emblem of the goddess cult" (Millon 1988a, 214).6

It is quite surprising that previous researchers have almost completely ignored what Agustín Villagra Caleti (1965) clearly expressed in the first lines of his article on the Atetelco paintings, where he observed the similarity with the Nahuatl toponym of Coyoacan or Coyohuacan (fig. 3.1b, c). A comparison of the toponym in the *Matrícula de tributos* (plate 25, unreadable

gloss) with its copy in the Codex Mendoza (fol. 47r, glossed "Coyoacan") and with the conquest glyph in this same codex (fol. 5v, glossed "Coyuacan") clearly shows that the Nahuatl toponym has the same formal structure as the Atetelco paintings. In the Coyohuacan toponym (where the locative suffix is not expressed graphically) the hollow circle inside the body of the coyote (coyo-tl) is a logogram for coyo-, from coyoctic ("pierced," "perforated"; Helmke, personal communication 2016). Both in the Matrícula de Tributos and in Codex Mendoza is another toponym that shares the same structural characteristics (fig. 3.1d, e). In the toponymic glyph for Ixcoyamec (Place of the Den of the Jabalí), an eye (ix-tli [eye] or, less probably, ix-co [in the face]) is represented inside the body of a jabalí, or wild boar (coyáme-tl); the locative suffix -c is implied and not expressed graphically. A comparison with the Nahuatl toponyms shows that the structure of the Atetelco paintings, where a sign is contained inside an animal's body, corresponds to a common pattern of glyphic compound assemblage. Accordingly, we should consider the possibility that they were emblematic or full-figure glyphs. As far as we know, the meaning of the transverse bars sign in Teotihuacán iconography has not been clarified (see Browder 2005, 307). However, in various Mesoamerican logographic systems the oblique bars (perhaps an iconic representation of geological strata) were used to signify an earthly essence.8

If we suppose, then, that the circle with transverse bars is a logographic representation of the word earth or land (independent of the language used to pronounce it), the Atetelco painting would correspond to a reading like "earth/land + coyote." If it were a toponym with an implied locative suffix, it could correspond with known Nahuatl and Mixtec toponyms. This last case is particularly interesting, since the hypothetical reading of Nuhu Ñaña as Land of Coyotes fits with the toponym transcribed as "nuu; uunana" in Antonio de los Reyes's Arte de la lengua mixteca (1593, 92) and translated as "Cuyocan" in Nahuatl. On the basis of these comparisons, I suggest that the Ateteco coyotes are to be understood as emblematic toponymic glyphs and that they are probably an early form of the glyph meaning "Coyoacan" in Postclassic Nahuatl writing (though not necessarily corresponding to the same place in the Basin of Mexico). As we will see in other cases, the identified toponymic function does not rule out the possibility that the fullfigure glyph could also have a titular value in the specific context of the Atetelco building.10

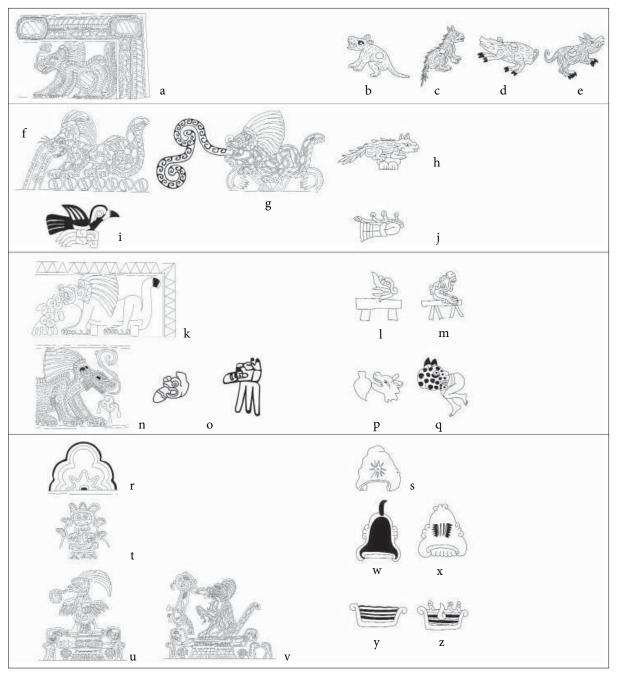


Figure 3.1. Comparisons among Teotihuacán images and Nahuatl toponyms: (a) coyotes in Portico 1, Patio Blanco, Atetelco, Teotihuacán; (b) Nahuatl toponym for Coyoacan, Matrícula de Tributos; (c) Nahuatl toponym for Coyohuacan, Codex Mendoza; (d) and (e) Nahuatl toponym for Ixcoyamec, Matrícula de Tributos and Codex Mendoza; (f) jaguar on stones (?), Great Compound, Teotihuacán; (g) jaguar on element with hands, Patio of the Jaguars, Teotihuacán; (h) skunk on teeth in Nahuatl toponym for Epatlan; (i) bird on knot from Totometla, Teotihuacán; (j) Nahuatl toponym for Amaxtlan (rotated 90°), Codex Mendoza; (k) puma that eats a heart and is shown with a stool, Tetitla, Teotihuacán; (l) and (m) Nahuatl toponyms for Ehecatlapechco and Oztotlapechco, Codex Mendoza; (n) coyote that eats a heart, Atetelco, Teotihuacán; (o) jaguars eating a heart, La Ventilla, Teotihuacán; (p) Nahuatl glyph for Teyollocualoyan, Codex Vaticanus A; (q) Nahuatl glyph for Tecualoyan, Codex Mendoza; (r) polylobed mountain with star, La Ventilla, Teotihuacán; (s) Nahuatl toponym for Citlaltepec, Historia Tolteca-Chichimeca; (t) polylobed mountain with obsidian knives, shallow basin, and twisted roots, Atetelco, Teotihuacán; (u) and (v) animals on shallow basins associated with obsidian knives, Atetelco, Teotihuacán; (w) Nahuatl toponym for Itztepec, Matrícula de Tributos; (x) Nahuatl toponym for Itztocan with serrated obsidian tools, Historia Tolteca-Chichimeca; (y) Nahuatl toponym for Atlatlauhcan, Matrícula de Tributos; (z) Nahuatl toponym for Cuitlahuac, Matrícula de Tributos. Drawings by Elbis Domínguez.

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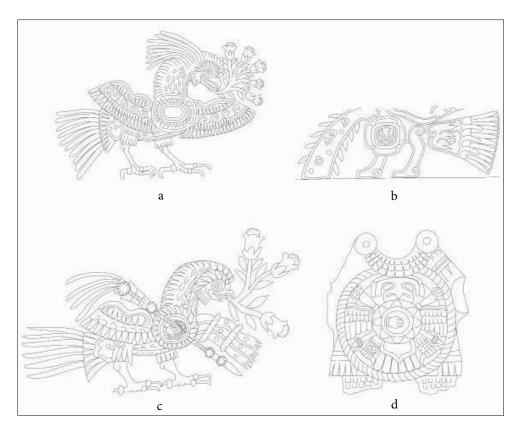


Figure 3.2. Teotihuacán birds with infixed glyphs: (a) painting with four-petaled flower, Amparo Museum of Puebla; (b) Zacuala painting with reptile-eye glyph; (c) mural painting from Techinantitla; (d) Teotihuacán figurine with "medallion." Drawings by Elbis Domínguez.

The Atetelco image also shows other interesting details. In the border enclosing the paintings, the shieldlike signs are not identical to those on the coyotes' bodies, but rather are glyphic compounds in which the transverse bars are framed by a band of coyote fur. This band functions as a synecdoche, or pars pro toto, of the coyote, implying exactly the same reading as the fullfigure image. The Teotihuacán artist painted a name (possibly a toponym) both in the emblematic and the condensed forms, also showing us how the condensation works through a process of "synecdochic synthesis."11 The morphological structure of an animal with a sign inside its body is extremely common in the Teotihuacán painting corpus, which implies a recurrent form of glyphic composition. Among the many examples, we mention various images of birds on whose chests appear condensed glyphs such as the four-petaled flower, the reptile-eye, or a hand with shield and spears (fig. 3.2), as well as the coyote with a star inside the outline of its body (fig. 3.3).¹²

Another analogous form of glyph compounding is expressed in the Teotihuacán paintings by the

juxtaposition of a glyph and the body of an apparently realistic animal, as is shown by various examples (see fig. 3.1f-h). This also occurs in the Totometla painting, where a bird is attached to a double-knotted cloth (see fig. 3.1i), a sign that is also common in Nahuatl toponyms, where it stands for the word *máxtlatl*, or loincloth (see fig. 3.1j).¹³ An interesting example of this kind of emblematic glyph can be seen in the so-called Orange Felines of Murals 1-4, Portico 13, Tetitla (see fig. 3.1k). The felines (most likely pumas) are shown with their abdomens resting on a white stool. In front of their mouths, trilobed signs represent stylized human hearts. Again, the comparison with Nahuatl writing (see fig. 3.1l, m) is revealing. In the glyphic toponyms of Ehecatlapechco and Ozotlapechco we can see a stool (tlapech-tli), on top of which rest the images corresponding to the name's first parts: the Wind God face (ehécatl) and the zoomorphic representation of a cave (óztotl).

Studying the hearts in front of Teotihuacán felines (see fig. 3.1n), Taube (2000, 30–31) demonstrated that this combination is a recurrent glyph in the Teotihuacán paintings (see fig. 3.10, p). His interpretation suggests that

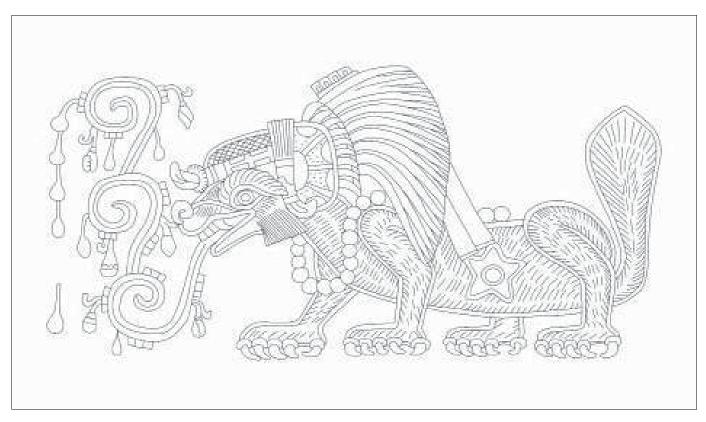


Figure 3.3. A coyote with an infixed star, Techinantitla. Drawing by Elbis Domínguez.

the human hearts placed in front of the Tetitla pumas should also have a specific glyphic significance. The same feline head/heart glyph appears in Codex Vaticanus A (3738) on folio 2r (see fig. 3.1p), where it stands for the place name of a mythic underworld site called Teyollocualoyan (Place Where Someone's Heart Is Eaten). A very similar structure is shared by the Tecualoyan toponym in the Matrícula de Tributos and in Codex Mendoza, where the lower part of a human body is substituted for the human heart (see fig. 3.1q). Moreover, teyollohquani or teyolocuani referred to a category of ritual specialists in Postclassic times, probably deriving from a warrior-priest title of Classic origins (Helmke and Nielsen 2011, 25–28). The structural analogy between Late Postclassic/Early Colonial glyphs and the Tetitla felines is self-evident, meaning that what we observe in Tetitla is obviously not the realistic image of a puma eating hearts while comfortably resting on a stool, but an example of a complex emblematic glyphic compound. 14 The appearance of both the stool and the feline-heart motif in later place names strongly suggests that the Tetitla emblematic glyphic compound could have been read as a place name or, more specifically, a building name. Since "Heart-Eater" was probably a Teotihuacán warrior-priest title, it is intriguing to imagine that the Tetitla mural painting labeled the building as the "Seat (or Platform) of the Heart-Eater," a label that in Nahuatl would be something like *teyollohquanitlapechco*.¹⁵

The assumption that many apparently realistic paintings could be "hiding" emblematic glyphic compounds of toponymic value is consistent with both the importance of toponyms in Mesoamerican inscriptions (see Brotherston 1999; Helmke and Nielsen 2014, 74–80) and with the abundance of toponyms in the Teotihuacán paintings, first noted by Jorge Angulo Villaseñor (1972, 50–51) and Esther Pasztory (1976, 186–87, 1988) in their discussion of phytomorphic imagery in Tepantitla and Techinantitla. The same theme has subsequently been explored by Janet Catherine Berlo (1989), George Cowgill (1992), Karl Taube (2000, 9), Timothy King and Sergio Gómez Chávez (2004, 216–26), and Christophe Helmke and Jesper Nielsen (2014).

Among the various possible examples, mountain toponyms are illustrative of the fact that toponyms in the Teotihuacán writing system often acquire an emblematic form that can be clearly understood as a glyph, especially 58 Domenici

through comparisons with Early Colonial Nahuatl place names (see Helmke and Nielsen 2014). For example, La Ventilla mountain containing a star (see fig. 3.1r; De la Fuente 1995) strongly resembles the Citlaltepec glyph as represented in the Historia Tolteca-Chichimeca (see fig. 3.1s). A similar case can be made for the so-called shallow basin (see fig. 3.1u, v; Taube 2000, 20), a sign interpreted as the representation of the Maw of the Earth or a cave, which often appears as part of apparently mimetic paintings.¹⁷ I would add that it shows a clear and interesting similarity to some forms of the sign for apantli, which often serves as the locative termination -apan in Nahuatl glyphic toponyms. The shape of the shallow basin—basically an inverted Tlaloc's bigotera—perhaps refers to the earthly matrix of the waters (see fig. 3.1y, z), variously assuming the form of an earthly mouth, a cave, a spring, or a riverbed. At Atetelco, the same sign is also associated with a mountain with curved and serrated obsidian knives (see fig. 3.1t) that bears a close similarity to the Nahuatl Itztepec glyph (Peñafiel 1885), as well as to the Itztocan glyph in the Historia Tolteca-Chichimeca (see fig. 3.1w, x; see Helmke and Nielsen 2014, 98-101; and Angulo Villaseñor and Malbrán Porto, chapter 2, this volume, for a similar toponymic interpretation of the Atetelco mountain).

It is important to stress that the frequency of signs that seem to have a toponymic value does not mean that all the emblematic glyphs should necessarily correspond with place names. An example that suggests a different function is that of the two looted murals from Techinantitla (De la Fuente 1995, 362, 365), which represent coyotes with feathered headdresses, jade necklaces, and triple speech scrolls (see fig. 3.3). The five-pointed stars painted inside the outlines of each of the bodies show that the paintings share the same morphological structure as the previously mentioned emblematic glyphs. Interestingly, if we suppose a star + coyote reading order, this would closely match the citlalcóyotl name that appears in Sahagún's Primeros Memoriales, referring to the costume of a war captain (fol. 69r; see Sullivan 1972, 186-87). The naming of military offices according to their specific costumes was quite common in Postclassic times, as shown by both the *Primeros* Memoriales and the Codex Mendoza. Not necessarily implying that the Techinantitla paintings represent the very same military office described by Sahagún, I simply suggest that the emblematic glyphs could convey the name of a costume corresponding to a specific military, political, or religious office. Helmke and Nielsen (2014, 91) proposed that the very same title could be signified by elements in the attires represented in the murals of Teopancaxco. Another political title or office could be expressed by the bird's body containing a hand and one or more darts (see fig. 3.2c, d), whose parallels with the nominal glyph of Spearthrower Owl at Tikal have often been noted (Stuart 2000; Langley 2002, 292–95; but see Borowicz 2003, 227–28). Claudia García–Des Lauriers (2008) recently proposed that the bird-hand-darts image could be a Classic period antecedent of the Nahuatl title *tlacochcálcatl* and that Teotihuacán buildings associated with the same glyph could be Classic versions of the *tlacochcalco* building, whose "genealogy" she traced through Xochicalco, Tula, Tajín, Chichén Itzá, and Tehuacán Viejo.¹⁸

The identification of possible political offices or titles in emblematic glyphic compounds is consistent with the interpretation of some condensed glyphic compounds as a form of naming (Millon 1988b, 124; Taube 2000, 15). Examples of this include those on a pottery vessel (Nielsen 2004), those of Series 3 of La Ventilla Glyphs Plaza (King and Gómez Chávez 2004, 228-33), those associated with full human figures in Techinantitla murals, and those on the bowl from Las Colinas (Millon 1973, 1988b). Nevertheless, it is not at all clear if these condensed glyphs are to be intended as anthroponyms, titles, or even ethnonyms. According to Taube (2000, 15), the Techinantitla glyphic compounds could be composed of a reference to an office (the headdress) and an associated anthroponym (the glyph, usually an animal or part of it). However, the Techinantitla glyph in which the headdress is associated with a bent human arm and eyes is structurally analogous to the glyphs on an Escuintla vase (arm + star and knot) and found at La Ventilla (arm + reed). The resemblance of the arm element to the Nahuatl ethnonym for the Acolhua and related toponyms (Acolhuacan, Acolman, etc.) has often been noted (Taube 2003, 61, figs. 6 and 7; King and Gómez Chávez 2004, 217-18; see also Berlo 1989, 20-23; Cowgill 1992, 239). This suggests that condensed glyphs associated with full human figures could correspond to ethnonyms or other names referring to corporate identities, as proposed by various authors (Millon 1973, 309; Taube 2000, 23; Manzanilla 2002, 7). I will return later to the frequent association between the condensed glyphs discussed previously and the so-called processional figures that, in my opinion, represent a different, "vestmental" register of Teotihuacán visual language.

Even if the interpretations proposed here for some of the emblematic glyphic compounds are overtly hypothetical, I would say—in agreement with Taube—that many of the apparently realistic images in Teotihuacán mural paintings were actually emblematic glyphic compounds. The juxtaposition of different elements in the images reflects a recurrent pattern of glyphic compound composition, as is the case in Postclassic Nahuatl glyphs. The specific meaning of emblematic glyph compounds seems to be mainly related to toponyms, political offices, and, perhaps, anthroponyms, that is, to the same semantic sphere usually associated with condensed glyphic compounds in Teotihuacán. The fact that these emblematic glyphs have usually been perceived as realistic and mimetic representations means that their specific logophonetic value has often been overlooked in favor of a symbolic interpretation.

CHIMERICAL IMAGERY AND THE TRAP OF VERISIMILITUDE

In an important work devoted to pictography, Carlo Severi (2004, 31) cites Amy Warburg's definition of a Hopi bird as "a hieroglyph, made to be deciphered and not simply contemplated. We are facing a compromise between image and sign, between realistic image-reflection and writing." Severi defined as chimerical those non-mimetic images composed of an agglomeration of heterogeneous graphic elements, stating that it is precisely their conventional, counterintuitive character that invests them with saliency. This makes them stand out relative to other images and indicates to the observer that a specific code is required for their understanding (Severi 2004, 75–86).

I would argue that this definition of chimerical imagery is appropriate to many Teotihuacán paintings.¹⁹ If the chimerical character of the more abstract glyphic compounds is self-evident, in other instances Teotihuacán images appear to be so realistic that we tend to overlook their chimerical essence. In his discussion of the emblematic style in Teotihuacán writing, Taube (2000, 24) commented that "Teotihuacán writing has been generally ignored not because texts are absent, but because many have been too large for ready identification." I would add that they are not only too large, but also too figurative for our eyes to immediately perceive their chimerical, non-mimetic, textual nature. I would also suggest that our difficulties in perceiving the chimerical character of Teotihuacán images derive not only from the mimetic prejudice of a vision trained according to the canons of Western art, but also from a specific attitude of the Teotihuacán (and, more generally, Mesoamerican) painters, who seem to have played with the verisimilitude of their paintings.

Adopting Pasztory's (1990-1991, 114) terminology, we could say that even if Teotihuacán art is mainly conceptual, its images playfully interact with their perceptual component, showing that the two aspects are not mutually exclusive. This attitude—already evident, for example, in the aforementioned example of the Tetitla Orange Felines—is also identifiable in such cases as the felines of Porticoes 1, 2, and 6 of the Patio of the Jaguars (fig. 3.4a). There we see apparently realistic images that could be described as felines playing conch-shell trumpets. Identical conch-shell trumpets are found in glyphic compounds where they are simply juxtaposed, in an overtly nonrealistic way, with human or animal bodies (fig. 3.4b, c), indicating that they function as glyphs. This juxtaposition suggests that the apparently realistic trumpetplaying felines are actually emblematic glyphic compounds composed of the animal body and heterogeneous graphic elements, such as speech scrolls, water drops, bivalves, and conch shells. Another example of the same visual strategy is to be found in the previously mentioned bird-hand-spears compounds. Sometimes the hand is painted as if it were actually holding the spears (e.g., fig. 3.2c). In other instances, the two elements are juxtaposed without any realistic intent, simply implying their functional relation in a logophonetic system (e.g., fig. 3.2d and the vessels in Séjourné 1959, 150, 1966a, 105, fig. 87).

A similar case is that of the renowned "Jade Goddesses" murals of Tetitla (e.g., fig. 3.5a), which have been the subject of a long discussion concerning their symbolic significance (see Pasztory 1988, 1997; Berlo 1992; Ruiz Gallut 2005; Paulinyi 2006, 2007). However, as observed by Taube (2000, 28), a detailed analysis of the images shows that they are composed of various recurrent glyphic elements (headdresses, shallow basins, necklaces, hands, etc.; see fig. 3.5b-d), thus suggesting that they are actually chimerical figures, which is to say, complex glyphic compounds disguised as mimetic imagery. Devising an emblematic glyphic compound, the painter assembled the different components so that they give a realistic, anthropomorphic appearance. However, his intent did not force him to reject codified elements with special significance, such as the nails of the hand signs. These were painted in such a counterintuitive manner that a modern interpreter (Miller 1973, 146) even proposed that the goddesses were painted with their backs facing us! On the contrary, I would say that such details as the counterintuitive nails provided saliency to the textual quality of the image, suggesting to the observer that it was meant to be read according to a specific code.

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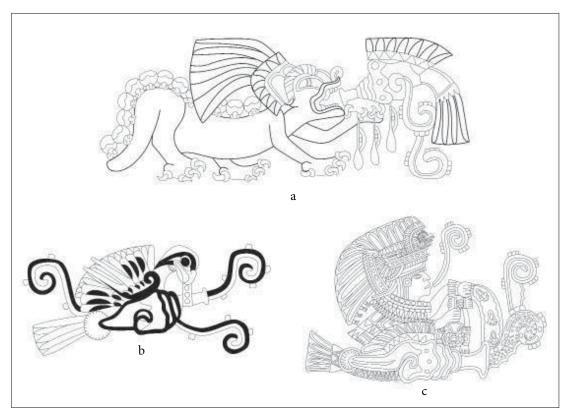


Figure 3.4. A comparison of the various uses of the conch-shell sign: (a) a jaguar playing a conch shell, Patio of the Jaguars; (b) a bird on a conch shell, Tetitla; (c) a human on a conch shell, Atetelco. Drawings by Elbis Domínguez.

In all these cases, the painter explicitly played with the codified character of the image, developing its components in a seemingly mimetic way, as if composing chimerical and textual images in a pseudo realistic form allowed him to obtain some sort of visual double entendre. The trained eye of a Teotihuacán observer would have immediately perceived the saliency of the glyphic signs, thus recognizing the text underlying the image, precisely as we do when we easily distinguish the alphabetic letter from its associated nontextual elements in a historiated initial in a medieval illuminated manuscript. When looking at Teotihuacán paintings we modern observers tend not to recognize the saliency of their glyphic elements, easily falling into the "trap of verisimilitude" prepared by the ancient painter.

THE REGISTERS OF TEOTIHUACÁN PAINTING

Does the recognition of the emblematic character of many large, realistic images at Teotihuacán imply that *all* Teotihuacán paintings must be read as logophonetic

glyphs? Should we then abandon any distinction between texts and images, between reading and symbolic interpretation? I would say that the total "imprisonment" of the emblematic images in the purely linguistic "cage" of glottography risks depriving it of the semantic opportunities afforded by the mimetic imagery. The simple fact that Teotihuacán painters used to "hide" their glyphs under a "mimetic disguise" suggests that they clearly perceived dissimilarity between two different, overlapping but still distinct, levels or registers of pictorial expression. I concur with Patrick Johansson's (2004, 44) statement on Nahuatl writing: "Word and image were strictly linked in the production of meaning, but the pictorial discourse was however not completely submitted to language. The image produced meaning by means of specific resources and, even if partially readable and reducible to words, was not petrified in a determined verbal text. There was a pictorial discourse running parallel to the verbal one but still with its own expressiveness."

To this point, we have discussed three different registers of Teotihuacán imagery: the mimetic, the condensed, and the emblematic, the last two being stylistic variations

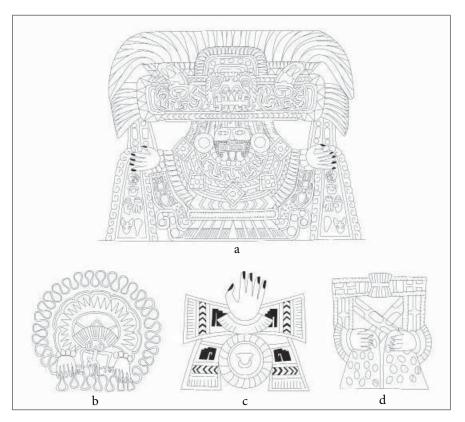


Figure 3.5. Uses of the hand sign: (a) "goddess," Tetitla; (b) Great Compound painting; (c) and (d) paintings from Tetitla. Drawings by Elbis Domínguez.

within one writing system. In my opinion there exists at least a fourth register that I will call, for lack of a better term, vestmental. This register is represented by such paintings as the priest processions, where the pictorial discourse is basically articulated through a complex system of headdresses and vestments. The attire—usually worn by identical, or nearly identical, full human figures (that is, with legs)—seems to allude to the political, military, and religious hierarchy of the city. This is so extensive that a code of headdresses seems to be one of the dominant themes of Teotihuacán paintings, as demonstrated in works by Clara Millon (1973), Zoltan Paulinyi (2001), and Cynthia Conides and Warren Barbour (2002). In these scenes, images seem to have a reduced logophonetic value and, significantly, it is precisely this kind of imagery that is sometimes flanked by condensed glyphs, as in the aforementioned Techinantitla examples. It is as if the information being carried by the condensed glyphs could not have been contained or "hidden" in the main image, which was devoted to expressing a different level of meaning.²⁰ In these cases, where writing and other forms of imagery coexist in a same graphic space, the Teotihuacán painters seem to have made explicit the nonlogophonetic value of the vestmental pictorial images, both by means of relative dimensions (the images being larger than the condensed glyphs) and by some qualifying details that are usually absent in condensed and emblematic compounds. Human legs seem to indicate the nonchimerical character of the painted human figure.21 From a compositional point of view, these images resemble the portraits on Maya and Zapotec stelae or in Mixtec codices, where detailed vestments and ritual paraphernalia were used as mostly nonlogophonetic vehicles for political or religious information, often referring to specific offices. At Teotihuacán, condensed glyphs thus play the same caption-like role as the inscriptions that in other Mesoamerican traditions usually flank human portraits in different visual media.

As in other registers, the dividing line between vestmental and logophonetic images is sometimes faint. If the headdresses are likely to allude to specific titles or offices, other details of the vestments seem to reflect expressions that are more clearly logophonetic, as often occurs in Classic Maya iconography.²² This is the case, for 62 Domenici

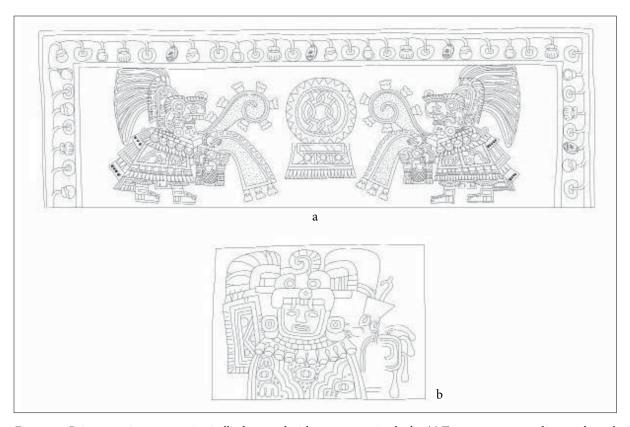


Figure 3.6. Priests wearing toponymic xicollis decorated with star-mountain glyphs: (a) Teopancaxco, according to a hypothetical reconstruction by Javier Urcid; (b) mural painting, Xelhá, Yucatán, based on photos courtesy of the "Proyecto La pintura mural prehispánica en México," Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México. Drawings by Elbis Domínguez.

example, for the "toponymic xicolli," the sleeveless jacket worn by the two Teopancaxco priests (fig. 3.6a) who are decorated with polylobed elements containing stars. We have previously compared the same combination with the Nahuatl Citlaltepec toponym. It is thus possible that these dress elements identify the individuals in a way that is different from the one expressed by their headdresses, perhaps affiliating them with a specific place or territorial unit. Even if such "toponymic xicollis" are (as far as I know) unique in Teotihuacán imagery, another possible example comes from the strongly Teotihuacanoid image at the Maya site of Xelhá, Yucatán (fig. 3.6b). This painting shows an anthropomorphic emblematic glyphic compound that is composed of a human torso-mountain that possibly has locative meaning. It has polylobed bands, eyes, and other signs. In fact, these motifs are painted in a manner that simulates the decoration of the Teopancaxco xicollis, thereby creating another of the double entendres so common in Teotihuacán imagery.²³

The four registers so far identified in Teotihuacán visual art often overlapped, and it was precisely the

faintness of their limits that allowed painters there to work in the gray areas. They created pictographic landscapes where condensed and emblematic glyphs intermingled with vestmental images in a wider mimetic pictorial context. The best example of this coexistence of various semantic layers is probably the so-called Tlalocan of Tepantitla Portico 2 (fig. 3.7). Here, we see a huge (toponymic?) emblematic compound composed of the torso of a god or goddess, a tree, two hands (with counterintuitively placed nails), and a mountain-like base with a basal cave-spring depicted as a Tlaloc "bigotera," or mustache. The composition creates a political scheme wherein a central place (Teotihuacán itself?), whose relevance is underscored by the emblematic form of its image as a Flowery Mountain, dominates and fertilizes secondary places. The latter are represented by condensed phytomorphic toponyms in the lower part of the mural. A third semantic register is represented by the two processional figures, whose vestments carry information related to the same code expressed in the headdress of the main toponym. Finally, at a more

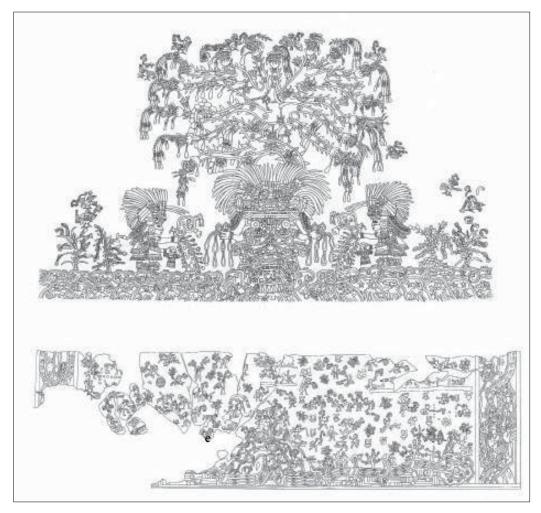


Figure 3.7. The Tlalocan, Portico 2, Tepantitla. Drawing by Jenni Bongard, reproduced from Annabeth Headrick, *The Teotihuacán Trinity: The Sociopolitical Structure of an Ancient Mesoamerican City*, © 2007. Courtesy of the University of Texas Press.

general mimetic level, the painting can be interpreted as an idyllic scene in which beneficial rain, brought by the mediation of the priests, pours from the deity's body (Flowery Mountain) to fertilize a flowered, happy, and multicolored world (see Browder 2005 for a detailed analysis of the Tepantitla murals). This mimetic semantic level allowed the Teotihuacán painter to elaborate on a common Teotihuacán metaphor that expressed political domination in the form of rain or fertilization.²⁴ The repetition, in the lower part of the painting, of vegetal elements that seem to be the local version of the reed or cattail glyph read by David Stuart (2000) as puh in Mayan inscriptions, may be another example of double entendre (see also Helmke and Nielsen 2011, 6-20). As mimetic images, they characterize the place as flowery, but as condensed glyphs they could well have alluded to a "Place of Reeds," probably a reference to Teotihuacán in Classic times that was later translated as "Tollan" among Postclassic Nahua groups. In the Tlalocan painting, the four registers of Teotihuacán imagery overlap without losing their specific characters, fully exploiting the potential of a polysemic and multidimensional system of visual communication.²⁵

IN SEARCH OF A SYNTAX

The proposed abundance of names, such as toponyms and titles, in the Teotihuacán mural paintings raises questions about their possible articulation into some kind of text. In fact, real lineal or columnar texts are extremely rare and seem to be mostly confined to speech

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scrolls probably corresponding to verbal expressions of the individuals represented (Barthel 1982; Pasztory 1976, 199; Taube 2000, 30-36; Colas 2011; Nielsen 2014). However, most emblematic glyphic compounds in the mural paintings are repeated in an iterative manner on the city walls. In most instances the same emblematic compound is simply repeated, but sometimes two or more glyphic compounds alternate, as in the case of the nine phytomorph toponyms of Techinantitla (Pasztory 1988, 137-61). This iterative pattern indicates that such glyphs were not functionally organized in lists like the structurally analogous Nahuatl glyphs referring to conquered (e.g., the Tizoc and Ex-Arzobispado Stones, Codex Mendoza) or tributary (e.g., the Matrícula de Tributos and Codex Mendoza) places. The obvious difficulty of identifying texts in the mural painting of Teotihuacán has sometimes led to the conviction that it represents a communication system devoid of any complex articulation, a writing system without syntax (Pasztory 1997, 192-94, 250; Headrick 2007, 25, 26; Cowgill 2015, 213-14).

I would argue instead that the very fact that Teotihuacán emblematic glyphs were often used in mural paintings provides an extraordinary opportunity to evaluate whether the spatial arrangement and functional articulation of architectural complexes—connected by traffic routes forming what George Kubler (1972, 75) called "liturgical continuity"—could provide clues regarding the syntactical relationships linking the glyphs painted on their walls. Unfortunately, most of the paintings visible today in the same architectural compound are palimpsests resulting from complex pictorial and architectural dynamics. Worse yet, their internal order has been largely obliterated by the hazards of time and archaeological excavation, which created the current synchronic view of chronologically heterogeneous, and thus syntactically unrelated, paintings. If the Teotihuacán murals were originally arranged in meaningful texts, this order has been disturbed considerably by Teotihuacanos and post-Teotihuacanos alike (e.g., Angulo Villaseñor 1987 and this volume).

Despite these shortcomings, some interesting clues can be drawn from specific cases, as exemplified by the so-called Zacuala Palace. This compound, which was entirely excavated by Laurette Séjourné between 1955 and 1958 (Séjourné 1959, 1966a, 1966b), has been the object of various analyses of traffic patterns and spatial logic (Hopkins 1987; Robb 2007). Notwithstanding the problems in the publication of the details of Séjourné's excavations, the available data and technical

characteristics of the Zacuala mural paintings indicate that they are synchronic.

Various authors have criticized the use of the term palace and prefer more neutral characterizations, such as residential compound. However, the comparison with known Aztec tecpans, or administrative palaces (Evans 2004), reveals a strong formal similarity (see also Nielsen and Helmke 2015a).²⁶ In both cases a main central patio or courtyard, whose access is located in front of the main platform, corresponded, in Aztec tecpans, to the lordly dais room. Various rooms are found on the side of the main patio. In the Aztec constructions these were occupied by functionaries, courtiers, family, and servants performing a wide array of activities (Evans 2001), as shown in the colonial drawing of the huetecpan of Texcoco in the Mapa Quinatzin (further discussion follows) or in the representation of Motecuhzoma's palace in Codex Mendoza. The search for a possible Teotihuacán royal palace has obviously pointed to central architectural compounds such the Ciudadela, the Street of the Dead Complex, the Palace of Quetzalpapalotl, and Xalla (see Manzanilla and López Luján 2001; Manzanilla 2004; Sanders and Evans 2006; Evans 2006). If such a central location is to be expected for the main seat of the city's political power, one might argue that the structural analogy between these central compounds, the Aztec tecpans, and Zacuala allows the interpretation of the latter as a lordly palace, perhaps the seat of a high-ranking lord and his court. If so, its mural paintings should convey a meaning consistent with this function.

Observing Zacuala's interior circulation routes, we see that a linear sequence of spaces starts from the access on the southeastern corner and leads to the central patio. While its northern, western, and southern sides are occupied by porticoes with rear rooms, its eastern side (opposite the entrance) has a huge platform. This is usually referred to as a temple or shrine, but the space could actually have functioned well as a lordly seat or throne room. In fact, a similar interpretation has been proposed for the main temple in the West Plaza Complex (Sanders and Evans 2006, 268). From the corners of the central patio, four L-shaped porticoes give access to four isolated (that is, not mutually communicating) architectural compounds that we will call "corner subcompounds."

If we examine the extant mural paintings, we clearly see that every spatial unit so far identified (access corridor, L-shaped porticoes, corner subcompounds, and the four structures of the central patio) is characterized by the repetition of a single image (fig. 3.8). This close

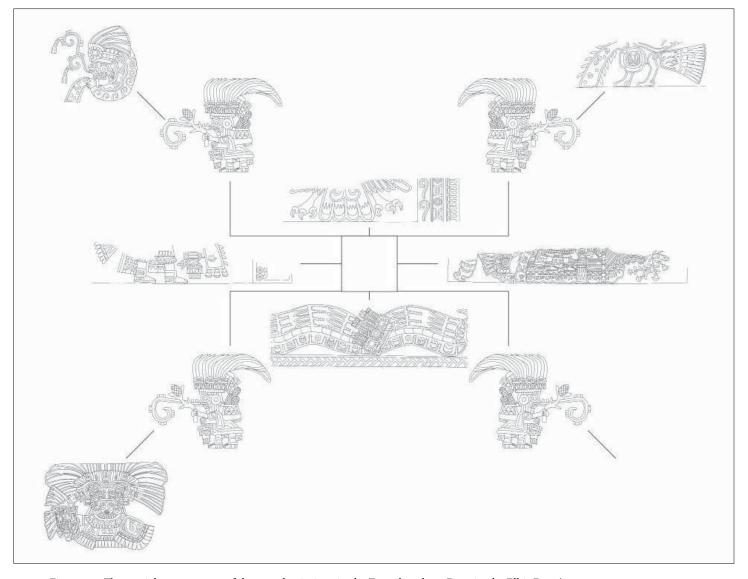


Figure 3.8. The spatial arrangement of the mural paintings in the Zacuala palace. Drawing by Elbis Domínguez.

correspondence between functional architectural units and their painted decoration confirms that some form of meaningful association was also perceived by the Teotihuacán inhabitants. Every corner subcompound is decorated by a single emblematic painting. Storm Gods (or Storm God impersonators with no legs) emerge from volutes in the southwestern unit (and in the access corridor), and birds with an infixed Reptile-Eye glyph on their breasts occur in the northwestern one, while anthropomorphs with jaguar costumes (but, again, without legs) are found in the southeastern entity.²⁷ Unfortunately, no mural painting is preserved in the northeastern subcompound. Each of the L-shaped porticoes features full human figures (with full legs) wearing

Storm God goggles and carrying maize stalks. The figures are painted as if they are walking from the patio toward the corner compounds. In the central patio, every portico and its rear room has a specific image. Raptorial birds appear in the west, while two different images including full-bodied individuals decorate the north and south porticoes. Although the paintings of the main platform are badly preserved, one area of it (perhaps the taluds or the pillars) preserved remains of an image of a feathered serpent carrying a headdress on his back. The border contains a mat motif.

Obviously, we are very far from "deciphering" the specific meaning of the Zacuala imagery, but our analysis of the spatial locations of paintings pertaining to different 66 Domenici

semantic registers allows further reflections on their relationship to the architectural elements and their functions. The main platform seems to be characterized as a lordly seat by a painting that, following a pattern that also occurs in the Feathered Serpent Temple and in the border of the Tepantitla priests procession, portrays the feathered serpent as carrying a headdress (Sugiyama 2005, 56-58). In the three previously mentioned cases, the headdresses are different and should be understood as references to specific political or religious offices. These offices are represented as carried items following a widespread Mesoamerican perception of political power as a heavy weight, as also expressed in the Spanish word cargo. The mat pattern in the border of the Zacuala main platform is also an obvious pan-Mesoamerican reference to the exercise of political power.

The two porticoes and associated rooms that flank the platform show two different vestmental representations, which again are probably references to subordinate political or religious offices. The raptorial bird in the facing portico is likely to be an emblematic glyph of unknown significance. The vestmental representations in the L-shaped porticoes seem to reflect their functions as connections between the main patio and the corner subcompounds. I would be tempted to interpret the Storm God impersonators bringing maize toward the corners as an expression of the Teotihuacán metaphor for the exercise of power as a fertile flow moving from the center to the periphery of the compound, in a cosmogram-like arrangement. The emblematic imagery decorating the four corner subcompounds is hard to interpret, but its one-to-one correspondence with architectural units suggests that it could be understood as an expression of the identity of the inhabitants of every unit. The structure of the birds with infixed glyphs suggests that at least some of the emblematic compounds could correspond with titles or place names. In sum, the Zacuala painted decoration seems to characterize the place as a lordly palace where the close correspondence between functional architectural units and images seems to reflect syntactical relationships, thus forming a spatial text, a conceptual map of the political identities of the palace inhabitants and of their mutual hierarchical relationships.

Zacuala was clearly not *the* royal palace of Teotihuacán, but it is probably a good example of the central, tecpanlike building of a secondary (but still high-ranking) sociopolitical unit whose relationship with the central government was likely implied by the specific meaning of the headdress on the feathered serpent body. Such a

political unit, or neighborhood, probably corresponded not to a single palace, but to a wider set of buildings. These included the palace and some surrounding residential compounds (as suggested by La Ventilla; see Gómez Chávez 2012) that were plausibly dominated by a lordly house (Gillespie 2000c; Joyce and Gillespie 2000; Chance 2004; Manzanilla 2012). The political identity of the unit was materially expressed in the Zacuala Palace, in architecture and paintings that seem to allude to political offices, and, perhaps, to corporate identities expressed as toponyms. Interestingly, toponyms abound in architectural compounds that, even if lavishly decorated, do not show the same spatial (i.e., single courtyard-centered) structure (e.g., Atetelco, Tetitla) and should probably be interpreted as dependent on, and spatially peripheral to, other central compounds.

The high degree of variation in the structure and decoration of Teotihuacán residential compounds (Manzanilla 2004) could reflect a functional and hierarchical organization of palaces. Such an organization resembles the one that, in Postclassic times, existed among the functionally and hierarchically differentiated tecpans, including administrative palaces of different rank, noble residences, pleasure palaces, and so forth (Evans 2004). The suggestion that different lordly—or even royal—houses could have coexisted in Teotihuacán, perhaps with a certain degree of economic and administrative independence, is compatible with its huge multiethnic population. This is also plausible in view of the polycentric—sometimes even heterarchical—character of many Mesoamerican polities. It is helpful to remember that at the height of the Aztec Triple Alliance, the Basin of Mexico still housed more than sixty tlatoque, who were politically subservient to the huey tlatoque of the excan tlatoloyan. Nevertheless, these tlatoque lived in their own tecpans that were located in the over fifty citystates. More than five hundred administrative palaces housed local lords of lesser rank (Evans 2004, 10-14, 2006, 289).

The much higher degree of territorial centralization of the elites that seems to be reflected in Teotihuacán by the number of lavishly decorated architectural compounds is to some extent reminiscent of the *mul tepal* political structure of such Postclassic Yucatec cities as Mayapán, where several noble houses or lineages coexisted in the capital under the rule of a paramount lineage but still governed their own territories (Tozzer 1941, 26). Interestingly, from the archaeological point of view, such a political structure seems to be reflected in the

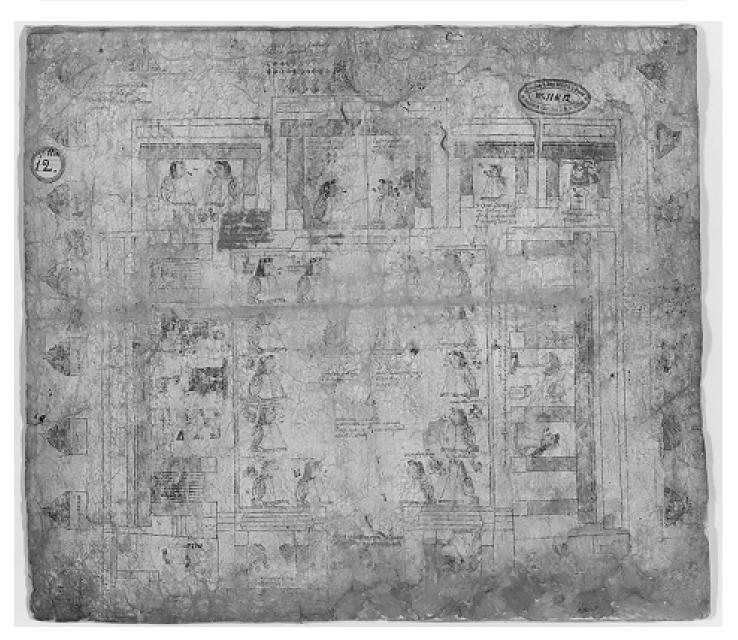


Figure 3.9. The Tetzcoco huetecpan, Mapa Quinatzin, folio 2. Reproduced with the permission of the Bibliothèque national de France.

abundance of plaza groups with colonnaded halls, which apparently corresponded to the several political units represented in the Yucatec capital (Ringle and Bey 2001). The coexistence of several palace-like buildings at Maya sites of various epochs has led Edward Kurjack (2003, 286–87) to state that the core of a Maya community was "a cluster of elites mutually linked through social ties," where "political authority and control derived from alliances between palatial establishments."

Despite the traditional view of Teotihuacán as having been ruled by a strong centralized government, an argument can be made for a similarly polycentric political structure at the settlement during the Classic period. As shown by many Maya cases, such a multi-house structure is not incompatible with the existence of a paramount ruling house or, as is more probable in the Teotihuacán case, with an alliance or confederation of various paramount ruling houses. Lesser lordly houses would have functioned as "structurally and functionally similar groups, which, by virtue of their similarity, compete for resources and positions of power and prestige" (Brumfiel 1994, 4). Their lavish tecpan-like compounds, functioning as theaters for a wide array of political and religious performances such as diplomatic encounters, feasting,

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chanting, and so on, would have been the main arenas for that competition.

Analysis of the Zacuala paintings has led me to propose that they reflect the inner structure of one of these sociopolitical units. In this architectural complex a central core (patio and platforms), associated with the exercise of specific political offices, was surrounded by lesser architectural units where corporate identities were probably expressed by toponymic references. Susan Toby Evans (2004, 48) stated that the Aztec tecpan had a "distinctive societal meaning, its courtyard and dais room shaping social and civic identity," while Susan Gillespie (2000b, 38)—borrowing the phrase from Adam Kuper wrote that a house society is a "royal house writ large," where the physical house functions as a "map of social relations" (Gillespie 2000a, 20). Zacuala is precisely this: a house where a political scheme is expressed materially in its architectural spaces and painted walls.

This concept of Zacuala as a "map of social relations" brings us back to the comparison with known genres of Postclassic Nahuatl pictography. If lists of conquered or tributary places do not seem to constitute a relevant basis for finding similarities, a much more meaningful comparison can be made with Early Colonial maps such as those painted in the Historia Tolteca-Chichimeca or in the Cuauhtinchan maps. In these, central places are surrounded by the toponyms of the dependant polities. The most cogent example for our purpose is probably the representation of the Texcoco huetecpan in the previously mentioned Mapa Quinatzin, fol. 2 (fig. 3.9). This document shows a lordly house containing pictorial information about the king and secondary nobles of the court and their relationship to specific architectural spaces. The exterior of the structure is surrounded by peripheral toponyms that express the territorial identity of the dependant lesser social units.28 It is my opinion that the arrangement of the mural paintings of the Zacuala palace and that of the painted elements of the Texcoco palace in the Mapa Quinatzin conform to a common pattern, reflecting a deep-rooted Mesoamerican form for expressing sociopolitical relations.²⁹

CONCLUSIONS

The comparison between Teotihuacán mural paintings and Late Postclassic and Early Colonial Nahuatl glyphs has allowed us to recognize common structural patterns showing that many Teotihuacán paintings that are

usually interpreted as realistic imagery-and consequently interpreted from a symbolic perspective—should rather be understood as emblematic glyphic compounds that reflect a proper logophonetic writing system. In agreement with the results of recent scholarship exemplified in the works of Taube, Helmke, and Nielsen, I propose that most emblematic glyphic compounds refer to toponyms, ethnonyms, and anthroponyms, as well as to political titles. In addition, I propose that the difficulty of distinguishing between realistic or mimetic imagery and emblematic logophonetic writing is partially due to what I called the trap of verisimilitude. I regard as characteristic the ability of Teotihuacán painters to intentionally play with the realistic appearance of their emblematic glyphic compounds, masterfully integrating conceptual and perceptual levels of meaning. This observation leads to a consideration of the coexistence of different levels of meaning expressed in Teotihuacán mural painting and to the definition—again, based on a previous similar proposal by Taube—of four different registers. These four registers—namely, the condensed and emblematic logophonetic registers of the writing system, a vestmental register mainly devoted to the depiction of costumes as badges of offices, and a properly realistic or mimetic one—were often integrated in the same pictorial space.

Finally, I address a problem that—although not explicitly denied—has received little attention in recent scholarship, which is the syntactical articulation of glyphic compounds in complex texts. The contextual analysis of the mural paintings in the architectural spaces of the Zacuala palace has led me to recognize a spatial syntax that could be interpreted as a map of sociopolitical relations. According to this perspective, such palatial buildings as Zacuala could, like Aztec tecpans, be perceived as the tangible expression of various lordly houses that coexisted in ancient Teotihuacán. The structural pattern shared by the mural painting of Zacuala and the constituent elements of the Texcoco tecpan as depicted in the Mapa Quinatzin shows that the syntactical articulation of the Zacuala paintings conforms to a typically Mesoamerican expressive genre and spatial practice. This is analogous to what Michel de Certeau (1984, 115-30) called a tableau, which presents territory as a locative space, emphasizes a static moment, and communicates the knowledge of an order of places (Leibsohn 1994, 166; Carrasco 1999, 18).

The non-narrative character of Teotihuacán art does not imply the absence of writing (vs. Pasztory 1997, 247). Much to the contrary, in many cases the inhabitants of Teotihuacán used glyphic writing in murals not to record narrative or calendrical histories, but to record a spatial and political order.³⁰ This order—based on the intimate relationships linking power, places, and identity—was described as static, timeless, eternal. However, it was not; the haphazard reality has subsequently transformed and even destroyed the many "architectural pages" of the ancient political tableau. Should we ever be able to reconstruct their original order and meaning, we will learn a great deal about the sociopolitical organization of the Central Mexican metropolis.

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NOTES

- 1. See Taube 2000, 5–15 and Browder 2005, 183–91, 263–72, for a synthesis of the history of scholarship on Teotihuacán writing. A logophonetic writing system uses both logograms and phonetic signs: the first represent words or morphemes and can be read in every language, while the second correspond to phonemes (syllables in Mesoamerican writing systems) and are thus linked to phonetic reading in specific languages. For the location of Teotihuacán, see chapter 1, maps 1.4a and 1.4b.
- Strong evidence has been presented in favor of the existence of inscriptions in Zapotec, Maya, and in an archaic form of Nahuatl (Cowgill 1992; Taube 2003; King and

- Gómez Chávez 2004; Helmke and Nielsen 2013b, forth-coming); no evidence of other plausible languages such as Otomi or Totonac is presently available. See Nielsen and Helmke 2011, 345–49, for a synthesis of the different linguistic hypotheses advanced for Teotihuacán. The best and most updated general synthesis on Teotihuacán is Cowgill 2015.
- 3. Langley (1993, 133) described four different functional categories of signs: notational, attributive, representational, and decorative, defined on the basis of their context. In a later work, he reduced the main functions to three, eliminating the narrative one and, in order to clearly distinguish among them, reduced his catalog of notational signs from 240 to less than 100 (Langley 2002, 277).
- Langley also used the term *emblematic*, but obviously
 with a different meaning. Taube stresses its value as a
 form of writing, while Langley stresses its non-notational
 character.
- 5. An earlier version of this analysis has been published (Domenici 2005, 131–33).
- 6. The same element appears in other Teotihuacán sign clusters, as in the headdresses in Tetitla Room 11, the shields or mirrors of the West Plaza Group, and possibly at the base of one of the phytomorphic toponyms of Tepantitla Portico 2, Mural 4, as well as at the base of another phytomorphic toponym in Techinantitla (Cowgill 1992, fig. 2).
- 7. Orozco y Berra (1880, 496) proposed that the white circle could be an ideographic reference to the adjective *huacqui*, "lean", resulting in the Coyohuac toponym signifying "Place of the Many Lean Coyotes." Orozco y Berra, followed by Peñafiel (1885, 83), also proposed that this original reading was later corrupted to the form Coyohuacan (Place of Those Who Own Coyotes), the term from which the glosses on the cited manuscript would have derived.
- 8. This is true of the oblique, often multicolored bands that can be seen in the bodies of the Mixtec Stone Men or *ñuhu*, in various mountain-like toponyms in Zapotec and Mixtec writing, and in the Nahuatl *tetl* (stone) glyph. In all these instances, the oblique bars are often associated with another semantic determinative, that is, the lateral scrolls indicating a "stony" essence that have their Teotihuacán equivalent in the "dull lunate crenellation" discussed by Helmke and Nielsen (2014, 81–82, fig. 5d).
- It is difficult to ascertain the reading order of the infixed glyph and the animal's body, since Nahuatl toponyms show great variability in reading order.
- 10. I would also suggest that the Atetelco glyph could be the structural antecedent of the Nahuatl toponym, where the inner element was changed to fit Nahuatl phonetics. In other words, it could be a phenomenon related to the one that León Portilla (2004) called "toponymic stratigraphy," where the graphic form of a toponym is more persistent than its phonetic value. A possible analogous case is that of

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the twisted roots often represented in Nahuatl phytomorphic toponyms but apparently devoid of any logophonetic value, since the locative suffix *-tlan* is usually represented by an infix in the form of human teeth. Very similar roots appear in Teotihuacán toponyms, where they can function as a suffix, perhaps locative, as suggested by the fact that the same roots also appear in nonphytomorphic images (see Taube 2000, 9). It is then possible that the persistence of their representation in phytomorphic Nahuatl toponyms was the result of a similar "toponymic stratigraphy." Helmke and Nielsen (2014, 78–79) recently commented on the resiliency of Mesoamerican toponymy, often resisting even language replacement.

- 11. By this expression, I mean that the condensation of an emblematic glyph or image in a condensed glyph works mainly through the selection of a meaningful part of the larger image. A similar process of condensation is shown by the Teotihuacán vessel discussed by Taube (2000, 23, fig. 17d), where a glyphic compound that stands in front of a human figure seems to be a condensation of his vestments. It is interesting that the original meaning of the selected part seems sometimes to be lost or silenced in the process. Such is the case of the eye-diamond sign found in Teotihuacán iconography, originally an adjectival element of the Fire God brazier expressing its cosmic centrality, but often simply used as a "fire" sign, thus alluding to the general meaning associated with the Fire God (see Domenici 2002).
- 12. Millon (1973, 308), listing some methods used by Teotihuacán painters, referred to this formal structure as "stamping the body of an animal with a glyph."
- Nielsen and Helmke (2015b) suggested that this Teotihuacán sign could be a logogram for "paper" or "headdress."
- 14. It is not surprising that a similar stool seems to be part of a Teotihuacán-style columnar text on a vessel from Escuintla (see Taube 2000, 21).
- 15. See Taube 2011; García-Des Lauriers 2008; and Nielsen and Helmke 2014 on the practice of naming buildings at Teotihuacán and the relationship of this practice to political titles.
- 16. Helmke and Nielsen (2014, 87) independently proposed the same reading, discussing the star-mountain toponym at Teotihuacán in much more depth.
- 17. Taube (2004, 39–41), commenting on a similar Olmec sign, suggested a specific toponymic value of this sign from Olmec times onward. Sload (2010) interpreted the shallow basin as a cave, a concept closely related to the Maw of the Earth in Mesoamerican cosmology. Helmke and Nielsen (2011, 20–22, 2013a, 401–3) have discussed a similar sign, appearing both with day signs and toponyms at Cacaxtla and Xochicalco, proposing that it can function as a preposition meaning "in," "inside," "over."

- García-Des Lauriers's interpretation is extremely interesting, since it rests on a comparison between Teotihuacán paintings and Aztec titles and buildings similar to the one we discussed regarding the Star Coyote emblematic glyph. Regarding the specific reading of the Teotihuacán glyph as tlacochcálcatl, however, there are some still unresolved issues, such as the specific value of the bird and of the hand signs. The fact that the hand always appears in the Teotihuacán version of the glyph, but not always in the Maya ones, suggests that it had a specific logophonetic value in the Central Mexican metropolis. Whittaker (2012) suggested that the hand sign in Teotihuacán painting could have been read in Nahuatl as macuil, five, as part of the Teotihuacán place name Maquixco. The reading is not convincing, and the disembodied hand seems to me to be too common in the Teotihuacán writing system—where it appears in widely different contexts—to have such a meaning.
- Langley (1993, 130) used the same term—but with a more general significance—in relation to animal imagery in Teotihuacán.
- 20. In cases such as the paintings in Tlacuilapaxco, in Tetitla Room 1, and on various painted vessels, processional figures alternate with emblematic glyphic compounds (see Taube 2000, 12–13, 23) that seem to play the same identifying role as the condensed glyphs.
- Both Berlo (1992) and Pasztory (1997, 210–19) observed the importance of the presence or absence of the legs in Teotihuacán anthropomorphic imagery but related their absence to images of gods.
- 22. In portraits of Classic Maya kings, personal names are sometimes embedded in the complex array of vestments and ritual paraphernalia adorning the royal person. See, for example, the famous Stela 31 from Tikal, where Sihyaj Chan K'awiil's costume contains various personal names, including the one of the king himself (Martin and Grube 2000, 34–35).
- 23. Helmke and Nielsen (2014, 90-91) independently observed the appearance of the star-mountain glyph on the garments of the Teopancaxco individuals and in the Xelha paintings.
- 24. As noted by Taube (2000, 26, 47), this same metaphor is represented visually by the serpents pouring water on phytomorphic toponyms in Techinantitla, in the Acanceh frieze, and on the stelae of Los Horcones.
- 25. See King 1994 for a similar discussion of the various semantic levels of Mixtec pictography.
- 26. Following a common convention, I use the term *Aztec* as a general name for Postclassic Central Mexican Nahua groups, including, for example, specific groups such as the Mexica, Acolhua, Tepanecs, etc., but not including eastern Nahua groups from the Puebla-Tlaxcala region.

- 27. I suggest that that the lacks of legs in these anthropomorphic figures is an indication of their emblematic function.
- 28. Leibsohn (1994, 175-79) has provided some interesting reflections on the toponymic expression of corporate social identities in Early Colonial Nahuatl documents. See also Sandstrom 2000, 65 for an example of contemporary Nahua corporate identities expressed by toponyms.
- 29. Taube (2011, 88–90) has recently compared a different set of Teotihuacán paintings (signs in grids) with a similar Postclassic Nahua maps genre depicting kings and tributary lords.
- 30. I am not denying the existence of narrative paintings in Teotihuacan, as shown by works by Nielsen and Helmke (2015b; Nielsen et al. forthcoming) on a mythological narrative related with the fall of the Great Celestial Bird and on a Maya historical inscription in Tetitla (Helmke and Nielsen 2013b, forthcoming); what I am saying is that many of the mural paintings in residential compounds correspond to a different, tableau-like communicative genre.

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From Orderly Past to Chaotic Present

THE TRANSITION TO SPANISH RULE IN AZTEC PICTORIAL HISTORIES

Lori Boornazian Diel



argely designed as political arguments or tools of persuasion that were manipulated to support dclaims of power and status, the elegantly constructed Aztec pictorial histories suggest that for their patrons, the more polished one's history, the stronger the political claims. In short, the past was given poetic form and cosmic order to explain and legitimize the present (Diel 2013). The pictorial histories that are known today were created after the conquest, and many of these continue uninterrupted through the Spanish invasion and imposition of colonial rule. Though compilations of indigenous history were still made during the Spanish colonial era, those accounts lack a cosmically ordered view. The implication is that under Spanish rule, order has given way to chaos. This stands to reason as the imposition of Spanish authority must have turned the native world upside down, and while there was continuity between the Aztec past and the colonial present—the Nahuas did not stop being Nahuas after the conquest-there was also a clear sense of a break with the orderly past that is communicated in the pictorial histories.

Frances Berdan (1993) explains the contradictory nature of the Early Colonial period well when she describes it as a time of "trauma and transition," meaning that though the Spanish conquest and imposition of colonial rule were traumatic for the native peoples, they still had strategies from the preconquest past that they

could summon to make sense of this new era. The pictorial histories were one of these coping mechanisms. In this chapter, I look at some of these pictorial histories and compare their preconquest and colonial sections in order to elucidate how they contrast an orderly Aztec past with an unruly colonial present. Thus, the histories eloquently visualize a sense of disorder that the Nahuas must have perceived as they adjusted to life under Spanish rule.

ORDERING THE MEXICA PAST

Though the Aztec empire may have been a confederation of three city-states—Tenochtitlán, associated with the Mexica peoples; Texcoco, capital of the Acolhua domain; and Tlacopan, home of the Tepanec peoples—the dominant force within the empire was clearly Tenochtitlán, with Texcoco typically described as its principal ally and second in command (Carrasco 1999, 437; Diel 2007, 266–68). The empire and its alliances were far from stable and united. Indeed, the members of the empire never saw themselves as a unified whole, nor did they even refer to themselves as *Aztec*, making this term problematic. Nevertheless, *Aztec* is useful for referencing the empire and its associated cultural productions as a whole, as I do here, while using more specific ethnic qualifiers when appropriate. For example, *Mexica*

is used to refer to the leaders of the empire and occupants of Tenochtitlán.²

Over fifty smaller city-states of various ethnicities were subsumed within the empire as subjects of one of the three primary cities. These secondary city-states, called *altepetl* in the Nahuatl language, served the primary city-states (or *huey altepetl*, for "great city-state") through both labor and tribute, and they were consolidated into the empire through an elite network. That is, upon a subject city's incorporation into the empire, its local leader was typically kept in power to act as a link between his subjects and the imperial administrative system.³ For local elite rulers, membership in the Aztec imperial network had its privileges. They were given gifts and access to land, which guaranteed their loyalty. Accordingly, communities often promoted their membership in the empire through historical records.

As Richard Townsend (1979) has argued, the Mexica, as the leaders of the empire, used art, architecture, and even city layout to send a message about their imperial power, essentially linking religious and state ideology into a sacred whole. The message was that the Mexica maintained an ordered universe (Townsend 1979, 9). Monumental art played a key role in disseminating this message of imperial control, as the Mexica state used public sculpture "to validate itself by representing its indissoluble connection with the sacred universe" (Townsend 1979, 22). One of the ways the Mexica communicated their sacred power was by linking key historic events from their past with the calendar (Umberger 1981). Such connections are particularly highlighted in their pictorial histories, which tend to be structured as yearcount annals, thereby emphasizing the link between Mexica history and sacred time.

Though no known pictorial histories from Central Mexico predate the conquest, a great number were created under Spanish colonial rule and must have followed preconquest precedents. Many colonial histories were formatted as year-count annals, and because so many of these annals-histories were created in Tenochtitlán or contain a significant amount of Tenochca history, Elizabeth Boone (1996) has argued that the year-count format itself was a diagnostic trait of Mexica imperial control. By aligning their history with the calendar, Mexica rulers, as the major patrons of the histories, emphasized a link between the Mexica state and the calendar. These highly ordered histories, then, gave a sense of cosmic validity to the past. Meanwhile, the appropriation of the year-count format by subjects of the Mexica

highlighted their own links to the imperial leaders and their membership within the empire. Moreover, by ordering their histories in mimicry of the Mexica, some minor cities communicated their own sacred nature.

The Aztec calendar, in which cyclical patterning is an inherent feature, is the primary organizing principle of the annals histories. Years were designated by one of four signs-Rabbit, Reed, Flint, and House-that rotated through coefficients from 1 through 13. Thus, the first year in the calendar was 1 Rabbit, followed by 2 Reed, 3 Flint, 4 House, 5 Rabbit . . . 13 Rabbit, then 1 Reed, 2 Flint, and so on. This resulted in a fifty-two-year cycle, after which the same sequence of year names repeated, thereby providing the Aztec calendar its cyclical grounding. Years of the same name were even believed to share particular associations. For example, famine was said to have ravaged Central Mexico in the year 1 Rabbit, so it was feared that famines would continue to occur in this same year in the future. H. B. Nicholson (1975, 491) called this repetitive, cyclical aspect of history "pattern history." Mexica historians must have manipulated their records to take advantage of the cyclical character of the calendar and its divine associations, which explains the highly ordered nature of these accounts. The Aztec year, too, was based on the 365-day solar year and the patron deity of the Mexica was Huitzilopochtli, a solar deity. This focus established a sacred connection between the calendar and the progression of time. Thus, key events in Mexica history tend to happen on significant anniversary dates, which infuse them with a sense of divine legitimacy (Umberger 1981).

Such historical manipulations become clear when we consider the repetition of the date 1 Flint in Mexica histories. Pictorial accounts associated with Tenochtitlán often begin with Mexica migrants who have been compelled by their patron deity, Huitzilopochtli, to leave their homeland, the island city of Aztlan, and journey in search of new land. This transformative event happened in the year 1 Flint, a date that becomes a touchstone in Mexica history if not a sign of Mexica supremacy itself, as events significant to them continue to occur in subsequent years with this same name (Umberger 1981, 11-12). In visual records of the migration, the 1 Flint date stands out. In the Codex Mexicanus (1952), created in late sixteenth-century Mexico City, the migrants step from the shore onto a timeline that begins with the year 1 Flint (fig. 4.1). A colonial book that combines pictorial and alphabetic writings, the $Codex\ Aubin$ (1981, fol. 1r–2r) also begins with an image of Aztlan and the start of the year count and migration, which again is 1 Flint. In the

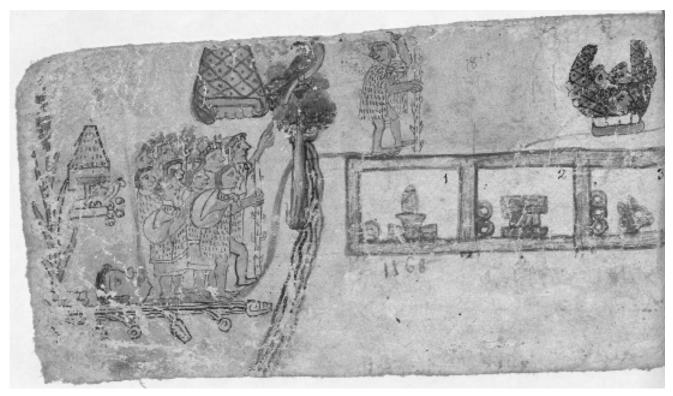


Figure 4.1. The Mexica migration, Codex Mexicanus 18. Courtesy of the Bibliothèque national de France.

well-known first page of the mid-sixteenth-century *Codex Boturini* (1964), the 1 Flint sign is flanked by the island of Aztlan to the left and an image of a Curved Hill, signifying a place called Teoculhuacan, to the right (fig. 4.2). Teoculhuacan was itself a sacred space linked to civilized Toltec ancestors and was typically the first stop on the migratory route. It appears also in the *Codex Mexicanus* image of the migration, though slightly cut off at the top of the page (see fig. 4.1). The *Codex Azcatitlan* (1995, fol. 1V–3r) begins its migratory account with an image of Aztlan, though it is undated; time begins at Teoculhuacan, the first stop, and again on 1 Flint.

The migration ended in the year 2 House (1325), when the Mexica founded their city on a swampy island called Tenochtitlán, as pictured in the well-known image from the *Codex Mendoza* (fig. 4.3). In the Aztec calendar, the year 2 House directly follows 1 Flint. Though the beginning and end of the migration were separated by an unclear number of fifty-two-year cycles, a sense of symmetry still inheres in these dates (Umberger 1981, 13). Also, both Aztlan and Tenochtitlán were island cities; thus, the Mexica ended much where they had begun but on a grander scale. The repetitions and ordering that characterize the migration legend suggest that the Mexica were destined to found this particular city in this

particular year, providing the Mexica and Tenochtitlán a sense of sacred legitimacy (Boone 1991, 148). Moreover, as explained by Townsend (1979, 37), Tenochtitlán itself became perceived as the orderly center of the world with chaos lurking just outside the empire's borders and beyond its sphere of influence. Ultimately, the migration and its cosmic order mark the Mexica migration account as truthful in a divine sphere and legitimize the supremacy of Tenochtitlán, and whether or not these events happened as they are told becomes immaterial.⁵

With their histories tied to the timeline, Mexica rulers became conceptually linked to the calendar, and royal dynasties could be seen as repeating cycles. Acamapichtli was Tenochtitlán's first official ruler, called a *tlatoani* (*tlatoque*, pl.), or speaker. Not surprisingly, many sources place his inauguration in the year 1 Flint (1376). Huitzilihuitl ruled next and Chimalpopoca after him, though his rule was cut short by his untimely death, which some sources say happened in the year 13 Reed (1427). Thus, Tenochtitlán's first three tlatoque ruled through a complete fifty-two-year cycle, associated with the initial growth of the Mexica state. Itzcoatl was inaugurated in the year after Chimalpopoca's death, which of course was 1 Flint (1428), according to the *Codex Mendoza* (fig. 4.4) and numerous other sources. His accession,

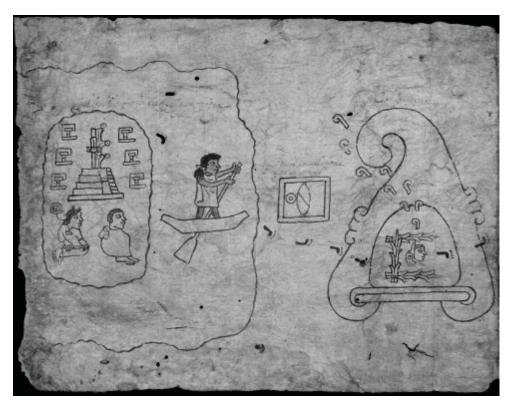


Figure 4.2. The Mexica migration, *Codex Boturini* 1. CONACULTA-INAH-MEX; reproduction authorized by the Instituto Nacional de Antropología e Historia.

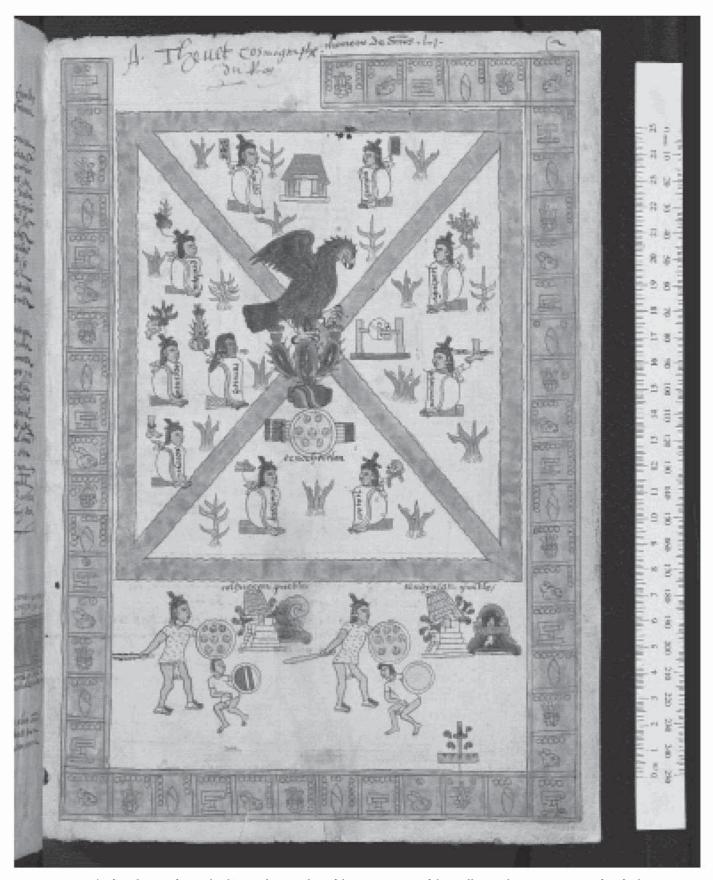
then, ushered in a new temporal cycle for Tenochtitlán, one associated with its ascendance. Indeed, Itzcoatl was said to have conquered the most powerful polity at that time, Azcapotzalco, the capital of the Tepanec domain, in the same year he was seated in power. This victory, which resulted in the establishment and meteoric rise of the Aztec empire, is shown as Itzcoatl's first conquest in the Codex Mendoza. Itzcoatl's inauguration on the fifty-two-year anniversary of Acamapichtli's accession, and his important achievements suggest that he was seen as a reembodiment of Tenochtitlán's inaugural ruler, with each initiating a significant era for Tenochtitlán.

The implication of the year 1 Flint for the Mexica is also evidenced by its inclusion on two of the best-known Mexica monuments, the Calendar Stone and the Temple Stone. The presence of the 1 Flint icon on each of these sculptures references the multiple significant events that occurred in years of this same name while also sending a message about the supremacy of the Mexica state via its cosmic validity, which in part is tied to the orderly structure of its history (Townsend 1979; Umberger 1988). Adding to the sacred character of this year, and accordingly the Mexica state, is its association with the Mexica patron

deity. According to the Nahua chronicler Hernando Alvarado Tezozómoc (1987, 230), Huitzilopochtli was born also in a year called 1 Flint.

If Acamapichtli and Itzcoatl can be seen as structural equivalents because each was inaugurated in a year named 1 Flint, then the same must be true of the two rulers who shared the name Moctezuma, as argued by Susan Gillespie (1989). The links between Moctezuma I and Moctezuma II are obvious through their common name; however, Gillespie has revealed other similarities. For the Mexica, rule passed from brother to brother, but Moctezuma I and II were each the sole ruler from their respective generations. Moreover, both of their successors seem to have been in doubt, and each of their daughters played a key role in the selection of a new ruler. Finally, according to some sources, Moctezuma II died in a 2 Flint year (1520), as had his namesake, exactly fifty-two years earlier (1468).

The patterning seen in Mexica history suggests historical revisionism, which is further supported by the Spanish friar Bernardino de Sahagún's well-known account of a book burning carried out by Itzcoatl and his ruling council. Ancient annals-histories had been saved but now needed to be destroyed, they explained: "It is not necessary



 $\textit{Figure 4.3.} \ \ \text{The foundation of Tenochtitl\'an}, \textit{Codex Mendoza}, folio \ \textit{2r.} \ \text{Courtesy of the Bodleian Library}, \textit{University of Oxford}.$

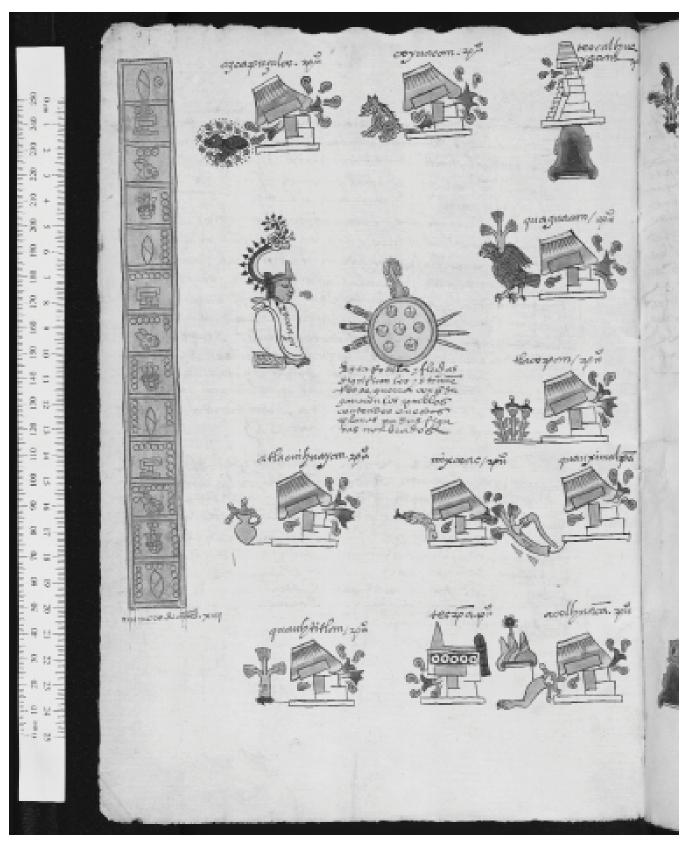


Figure 4.4. The reign of Itzcoatl, Codex Mendoza, folio 5v. Courtesy of the Bodleian Library, University of Oxford.

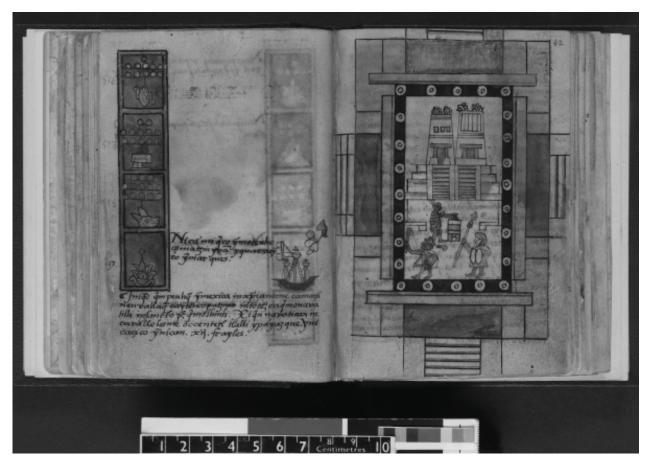


Figure 4.5. The arrival of the Spaniards, Codex Aubin, folios 41v-42r. Courtesy of The Trustees of the British Museum.

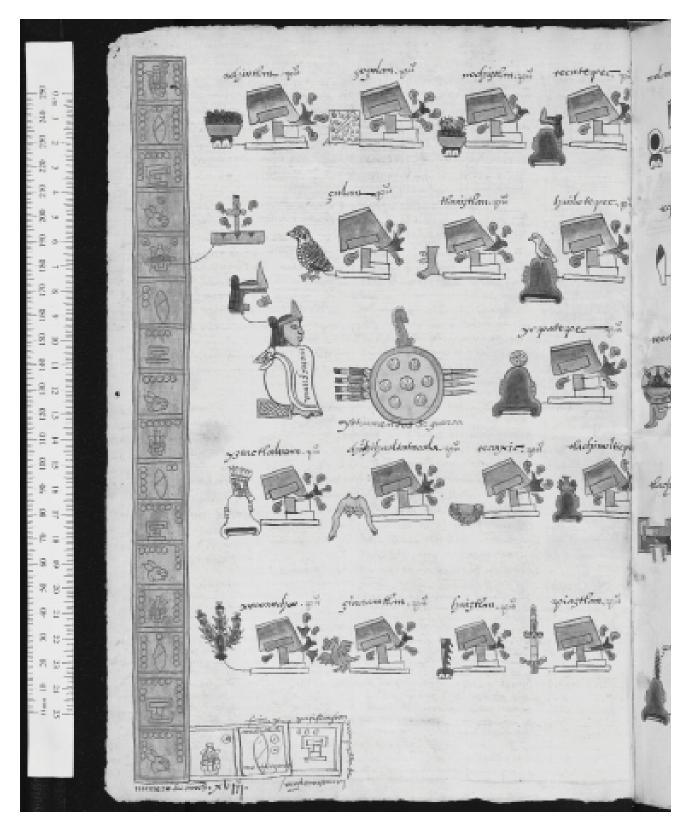
for all the common people to know of the writings; government will be defamed, and this will only spread sorcery in the land; for it containeth many falsehoods" (Sahagún 1959–1982, 10:191). If the old books were said to hold "falsehoods," then the implication is that the new books were more "truthful." Accordingly, the manipulated nature of the known Mexica histories suggests that such truth was found in poetic ordering, with this newly written history being an idealized one in which key events were purposefully dated to send a symbolic message (Umberger 1988, 353).

The similarities between the reigns of some Mexica rulers (the two Moctezumas and Acamapichtli and Itzcoatl, respectively) must reflect a consciously imposed, cyclical patterning indicative of Aztec perceptions of sacred kingship. The symbolic connection between the calendar and the royal dynasty expressed a relationship between the cosmos and the state that incorporated the rulers, their histories, and their destinies. As Gillespie (1989,17) states, such patterning in the reigns of the Mexica rulers reflects a view of rulership "in which the nature of the king is tied to the functioning of the cosmos; thus,

kingship, like the cosmos, is cyclical." Because their cosmology insists on order, Mexica supremacy was explained and legitimized by their poetic ordering of history, which placed the Mexica state and its rulers in the sacred sphere (Florescano 1994, 10–11). As Enrique Florescano (1994, 47) comments, "If for western thought an event is historical only if it is produced in a profane time and space, stripped of transcendental meaning, for the Mexica mentality, the historical is exactly the opposite: the event that has weight is the one that is endowed with significance that transcends the time and place in which it is located." For the Mexica, historical events and peoples were legitimized through their ties to the sacred calendar.

THE COLONIAL PRESENT IN MEXICA HISTORIES

The sacred ordering of history disappears, however, when the Mexica pictorial histories continue through the conquest and imposition of Spanish rule. In the *Codex Aubin*,



 $\textit{Figure 4.6.} \ \ \text{The reign of Moctezuma II, } \textit{Codex Mendoza}, folio\ 15v.\ Courtesy\ of\ the\ Bodleian\ Library,\ University\ of\ Oxford.$

for example, discontinuity is evidenced by comparison of the layout of its colonial history with its earlier sections. The Codex Aubin begins with the Mexica migration, but the creator of the book did not organize the timing and events of the migration in a tidy fashion. Each page in this section is devoted to a variable number of years, whereas upon the foundation of Tenochtitlán, the history presented in the same book becomes highly ordered, with each page devoted to exactly five Aztec years and their associated historical events. This organizational device changes again upon Spanish arrival in the year 1 Reed (1519). The page portraying this event includes only four years rather than the typical five (fig. 4.5). Moreover, the 1 Reed page is not followed by more year signs but instead by a full-page image of a battle at Tenochtitlán followed by four and a half pages of alphabetic text (Codex Aubin 1981, fols. 42r-44v). This composition signals the beginning of a new era, one that can be perceived as disorderly. The creator of this book tried to continue to devote five years to each page but soon reduced this to two years on a page, followed by one year per page. Of course, the colonial history is much fuller as the scribe is recording events from his own times, but again there is a sense that life under Spanish colonial rule cannot be ordered as harmoniously as the preconquest past. Indeed, the unsystematic composition of the colonial section is reminiscent of the migration account and suggests that both periods were seen as times of transition bracketing an idealized era and giving a sense of symmetry between the periods.

A similar breakdown is seen in the Codex Mendoza (1992). Created after the conquest and at the request of the Spanish viceroy, the dynastic history presented in the Mendoza is highly idealized and most likely copied from a preconquest source, thereby reflecting an officially sanctioned Mexica version of history (Boone 1992, 50). The original painter of this book initially ended his dynastic history in the year 13 Reed (1518), perhaps because his original source also ended in this year (fig. 4.6). Such a terminal date would have been unusual, however, because the representations of earlier rulers in this codex cover the complete years of their reigns, including the years of their deaths (Boone 1992, 37). Perhaps aware of the discrepancy, either the same or a different artist added the two additional years of Moctezuma II's reign, 1 Reed (1519) and 2 Flint (1520). However, these were left unpainted, creating a sense of disruption with the year count's neat progression that coincides precisely with the year of Spanish arrival. Adding to the seemingly haphazard rendering of the last years of Moctezuma II's reign, another scribe inserted a third year, 3 House (1521), even though Moctezuma II had died the year before. Perhaps this was done in order to correlate the end of Mexica dynastic history with the year of the final conquest, as alphabetic notations added to the manuscript after it was painted state that Moctezuma II died in 2 Flint and that 3 House was the year of the conquest. However, the visual imagery alone suggests that Moctezuma II's reign ended in 3 House, which brings his reign more in line with that of his namesake, Moctezuma I. According to this same manuscript, the first Moctezuma's last year in office was also a 3 House year (1469).7 The addition of the 3 House year, then, gives a sense of completion to Mexica history and an end to its cosmic nature. Indeed, the subsequent rulers, Cuitlahuac and Cuauhtemoc, were left out of the Codex Mendoza even though most other Aztec histories continue uninterrupted into the Colonial period.

The dynastic history of the Codex Azcatitlan resembles that of the Codex Mendoza in that its history following the foundation of Tenochtitlán is organized by the reigns of the Mexica rulers. However, here, too, we see a different approach to the Spanish arrival. Similar to the painter of the Codex Mendoza, the painter of the Azcatitlan (1995, fols. 21v-22r) ended the Mexica dynastic sequence with Moctezuma II and did not include his successors, Cuitlahuac and Cuauhtemoc. The subsequent history, devoted to the conquest and Early Colonial period, is told in narrative fashion, like the Azcatitlan's record of the Mexica migration. Just as the Codex Aubin did, the Azcatitlan pictures both the migratory and early colonial periods as times of transition. Nevertheless, unlike its migration section, the colonial portion of the Azcatitlan does not use year signs, which suggests that the postconquest era was regarded as fundamentally different from the past and impossible to link with the Mexica progression of time.

Not all histories create so clear a distinction between the Mexica past and Spanish colonial present. For example, José Rabasa (2011, 11) has pointed out that the *Codex Telleriano-Remensis* shows a clear break between the Mexica migration account and dynastic history, whereas little disruption is seen in the colonial section. The migration account was likely painted by a different artist than the one who painted the dynastic and colonial histories (Quiñones Keber 1995, 123–24). The dynastic and colonial histories are formatted in a consistent manner and were painted by a single artist; subtle signs of a changed conception of history in the *Codex Telleriano-Remensis* have more to do with its style. For example, it is only in the

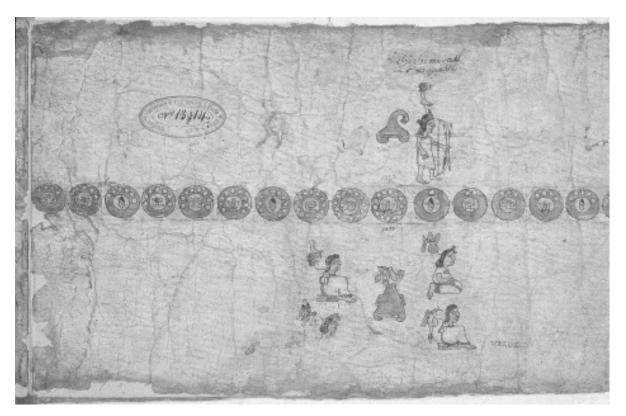


Figure 4.7. The Tepechpan migration, Tira de Tepechpan 2. Courtesy of the Bibliothèque national de France.

colonial section that the native painter uses a more European, illusionistic style, suggesting a new way of seeing and representing the world associated only with the colonial era (Rabasa 2011, 52). The same is true even in more provincial work like the $Codex\ Azoy\acute{u}$, a sixteenth-century manuscript made in Guerrero. This pictorial annal-history communicates little disruption in terms of its organization of time and historic events upon Spanish arrival, but a new style appears with the first Spanish conquistador, who is shown in a three-quarter view as opposed to the profile view used by the same artist throughout the earlier portion of the history ($Codex\ Azoy\acute{u}$ 1991, fol. 32).

TEPECHPAN'S ORDERLY PAST

The Mexica were not alone in ordering their historic accounts to give them cosmic validity. We see this same process in a pictorial history from Tepechpan, a relatively minor city that was a subject of the Aztec empire (Diel 2008). Painted by a number of artists during the second half of the sixteenth century, the *Tira de Tepechpan* is a pictorial record of important events from the fourteenth

through sixteenth centuries, which are placed above and below a continuous line of Aztec year signs that runs the length of the history (fig. 4.7). The upper register pictures Tepechpan's history, while the lower one documents the history of Tenochtitlán. In 1519 Spaniards enter the history, but rather than bringing it to a close, they simply replace the Mexica ruling apparatus with their own; at least this is the way the contributors to the *Tira* present it. Though Tepechpan was a subject of the huey altepetl of Texcoco, the *Tira* is clearly modeled after the annals of the more powerful Tenochtitlán in terms of its content, format, and orderly structuring. Thus, the patrons of the *Tira* emphasized Tepechpan's links to the great capital city and the sacred calendar, surely in an attempt to elevate the prestige of their own more minor city.

The *Tira de Tepechpan* is similar to Mexica histories in a number of ways. The previously mentioned format of the year-count history includes shifts in colors that are associated with changes in rulership at Tepechpan. For example, upon a ruler's inauguration, the years may change from yellow to blue and then from blue to red upon that ruler's death and the accession of a new ruler. This device emphasizes a link between Tepechpan's rulers and the calendar. The content of Tepechpan's history also appears to have

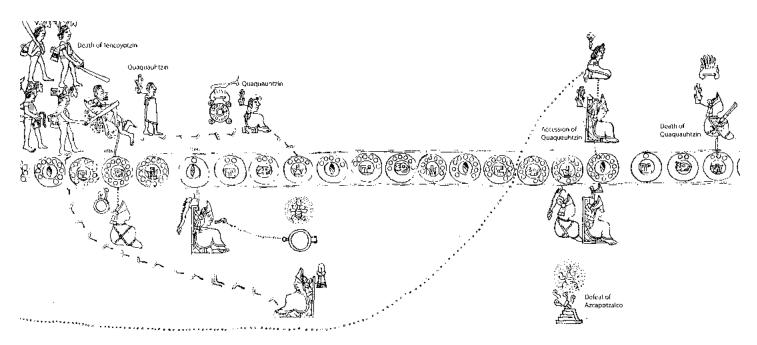


Figure 4.8. The death of Tencoyotzin and inauguration of Quaquauhtzin II, Tira de Tepechpan 9 and 10. After Aubin 1849–1851.

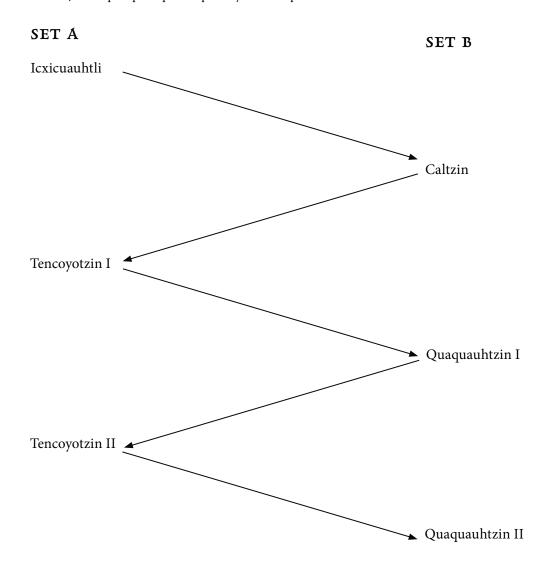
been modeled after Tenochtitlán's. It, too, begins with a migration, linked also to the year 1 Flint and the place Teoculhuacan. In the Tira, a Tepechpaneca migrant appears above the 1 Flint year sign and in front of the Curved Hill place sign (see fig. 4.7). By appropriating the sacred time and space of the Mexica migration, Tepechpan's historians suggest that Tepechpan, too, would be a glorious city (Diel 2008, 26-28). Indeed, the foundation of Tepechpan a few years later is also given religious undertones, as Tepechpan's migrant reappears. He is now seated on a woven reed throne, called a tepotzicpalli, placed on top of the icon for stones, which functions as the place sign for Tepechpan (Diel 2008, plate 3). The new ruler's throne is set beside the open maw of a personified cave, suggesting that the newly founded Tepechpan is a sacred space (Diel 2008, 41-43).

From the city's foundation to the years just before the Spanish invasion, Tepechpan had six rulers, and their reigns also reveal cyclical patterning reminiscent of the Mexica (table 4.1). According to the *Tira*, Tepechpan's founder, named Icxicuauhtli (Leg Eagle), was the city's first ruler. Upon his death, Caltzin (House) became the city's next ruler, followed by a man named Tencoyotzin (Coyote Lips). Tencoyotzin's reign came to an abrupt end when he was assassinated by Tepanec forces sent by the ruler of Azcapotzalco, as graphically represented in the *Tira* (fig. 4.8). A man named Quaquauhtzin (Wooden Stick) appears in the history just after Tencoyotzin's

death, suggesting that he was heir to the throne, but he must have been unable to be officially seated as ruler while the ensuing battle between Tenochtitlán and Azcapotzalco was fought (the famous Tepanec War that would establish the Aztec empire). Finally, upon the defeat of Azcapotzalco, which is shown on the lower register of the manuscript, Quaquauhtzin was officially inaugurated as Tepechpan's ruler, as recorded in the top register. However, his reign, too, was short lived; only a few years later, his funerary bundle is shown impaled with an arrow, signifying yet another assassination. Tepechpan was then left without a ruler for a number of years until another man by the name of Tencoyotzin (II) became ruler in 11 Reed (1451). After a long reign, Tencoyotzin II was succeeded by Quaquauhtzin (II).

With rule passing from father to son, Tepechpan's dynastic sequence reveals an elegant pattern (Diel 2008, 68–71). Based on the repetition of names, rule at Tepechpan appears to alternate between rulers of two sets (see table 4.1). The first set (Set A) includes the founder Icxicuauhtli, his grandson Tencoyotzin I, and his great-great-grandson Tencoyotzin II. The second set (Set B) includes Caltzin, his grandson Quaquauhtzin I, and his great-great-grandson Quaquauhtzin II. The organization of Tepechpan's rulers into these two sets is justified and highlighted by Tepechpan's history itself because the final two rulers in each group take the names of their grandfathers. The fifty-two-year cycle approximates two

TABLE 4.1. Tepechpan's preconquest dynastic sequence in two sets



generations; therefore, grandfathers and grandsons tend to live during the same named years, suggesting a bond between them. For example, each of the rulers in Set A ruled during the year 2 Reed, a key date in the calendar because it marked the completion of one calendric cycle and the hoped-for start of the next.

The repetition of names certainly highlights a special bond between grandfathers and grandsons, as each grandson is marked as the cyclical embodiment of his namesake. Similarities among the rulers in each set underscore this structural equivalency. For instance, important events for Tepechpan tended to happen during the reigns of Set A. According to the *Tira*, Icxicuauhtli founded the city and established its ruling dynasty, Tencoyotzin I was a victim of aggressions with

Azcapotzalco and as such instigated the Tepanec War, and Tencoyotzin II distributed *calpulli* lands and established tribute obligations. In Set B, each of the rulers named Quaquauhtzin ruled for only a few years that are marked with blue year disks in the *Tira*, and both their reigns were followed by an interregnum, marked with yellow year disks.

The patterning of names also stresses the continuity of Tepechpan's dynastic line despite its numerous interregnums and the unnatural deaths of Tencoyotzin I and Quaquauhtzin I. Indeed, the repetition of names highlights familial links between Tencoyotzin I and II and between Quaquauhtzin I and II. The shared names mark each of these pairs as grandfather and grandson, which suggests that each of the assassinated grandfathers was

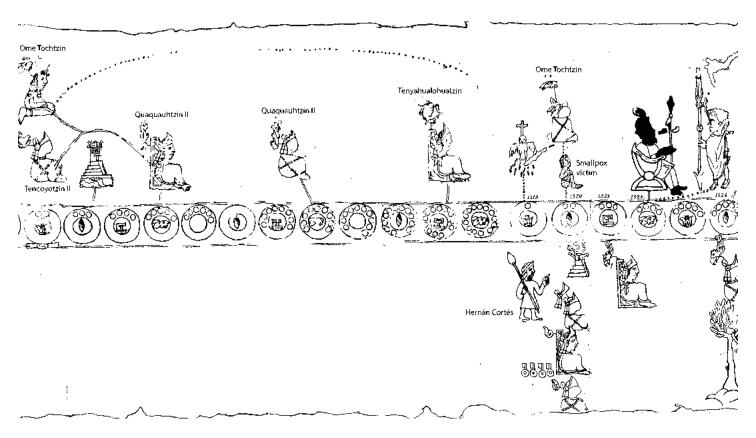


Figure 4.9. The death of Quaquauhtzin II and inauguration of Tenyahualohuatzin, Tira de Tepechpan 14 and 15. After Aubin 1849-1851.

killed *after* siring an heir. The message the *Tira* sends is that, just like Tenochtitlán's, Tepechpan's dynastic sequence was unbroken and its rulers were legitimate and even favored by the gods because their destinies were so harmoniously tied to the calendar.

TEPECHPAN'S CHAOTIC COLONIAL PRESENT

The last ruler to be inaugurated in Tepechpan before the Spanish invasion was named Tenyahualohuatzin (Lip Procession), and he occupies an ambiguous position in the schema I have presented. The interregnum preceding his accession implies some sort of disruption following the untimely death of his predecessor, Quaquauhtzin II (fig. 4.9). Here, again, the years turn to yellow, and it is likely that Quaquauhtzin II's mother, Ome Tochtzin (Two Rabbit), who was pictured above her husband (Tencoyotzin II) at the record of his death in the *Tira*, acted as ruler during the periods preceding and following Quaquauhtzin II's reign. At the record of her death, her funerary bundle is topped with the turquoise diadem of

a ruler. Nevertheless, she is not shown in the manuscript as a living ruler, perhaps because female rulership was uncommon and was only needed in the event of a breakdown in rule, an event that the histories tend to downplay (Diel 2005, 90–93).

Following the alternation in rulership outlined previously, Tenyahualohuatzin would be the fourth ruler in Set A. As each of these rulers had significant reigns, the implication is that he, too, will rule during interesting times. Indeed he does, for he governs through the Spanish invasion (see fig. 4.9). However, his unique name and the changes that come to Tepechpan with the imposition of Spanish rule suggest that his reign ushers in a new era for Tepechpan, one tied to Spanish rather than Mexica imperialism. The inference is that the Spanish invasion was a preordained part of the cosmic progression, bringing about a new conception of time and a new imperial order, a time of transition through which Tenyahualohuatzin was destined to rule. Indeed, a later annotator even began correlating the native year signs in the Tira with their European counterparts; this annotator added the year correlations sporadically in the preconquest section of the history, but upon Tenyahualohuatzin's inauguration

in 1517, correlated all subsequent Aztec years with their European equivalents. These additions suggest that a new conception of time, one associated now with Christianity, began at Tepechpan upon Tenyahualohuatzin's accession and two years before the arrival of Hernán Cortés.

Nevertheless, this new era of time was by no means as orderly as the past. In the colonial section of the *Tira*, we see a cacophony of information, especially when compared to the sparse preconquest section. A number of painters contributed to the colonial contents of the manuscript, whereas only one tlacuilo (scribe) painted the preconquest section. Working closer in time to the events they recorded, the later painters continued to register the accessions of Tepechpan's colonial rulers, now marked as Spanish-style governors via their crowns and folding chairs, but their deaths are not shown, nor do their names suggest cyclical patterning. These later painters focused more on life under Spanish rule and especially on events that affected the leaders' ability, or lack thereof, to fulfill increasingly burdensome tribute obligations. Though these additions to the Tira seem more evocative of newspaper accounts, providing updates on events important to the local community rather than historical revisionism, these particular events were still chosen by the later painters because of their political import. Lost in this more recent history, however, is the elegant ordering of events for symbolic impact. Indeed, the breakdown of order in the colonial section of the Tira may reflect a general breakdown affecting Tepechpan itself, with emphasis placed on the devastations of the community rather than its glories (Diel 2008, 86-92).

In a departure from the preconquest history of Tepechpan, the later painters focused more attention on Tepechpan's mundane affairs, especially those concerning difficulties in meeting its tribute obligations. They recorded, for example, a number of epidemics and associated deaths (Diel 2008, plates 15-19). A smallpox epidemic was noted for 1 Reed (1519) via a nude figure covered in pockmarks (see fig. 4.9). More epidemics were shown in 1 House (1545), 6 Flint (1576), and 5 Flint (1588) through images of a naked man, placed upside down and with blood issuing from his mouth. The resultant deaths from these and other epidemics were documented with simple and increasingly frequent representations of skulls. Newly imposed tribute obligations were also recorded and must have compounded the troubles of the local community. In one detail, the skull of death was even haphazardly placed on top of the leg of a census taker, suggesting the chaos of the new colonial era; with so many deaths, how would the community meet its obligations? One of the last representations in the manuscript, which was placed immediately next to an image of sickness, is a depiction of corn plants with the word *tlapachichi*, or grasshopper, written on top and indicating crop damages by grasshoppers. Tepechpan's colonial history, then, was one of random hardships rather than orderly glories.

While the *Tira's* original tlacuilo presented an ordered history, the later artists increasingly focused on Tepechpan's troubles under Spanish colonial rule. Epidemics, escalating tribute obligations, and failed crops clearly had a detrimental effect on the altepetl. Therefore, the later painters—surely at the behest of members of Tepechpan's governing elite, who would have been responsible for making up for any tributary shortfalls—documented these hardships for the once prestigious Tepechpan. While the breakdown in order recorded in the *Tira* reflects a general sense of loss, it also likely shows knowledge of the changing function of history under Spanish colonial rule. Expressions of poverty were a typical legal device in New Spain, often referenced by local communities in petitions to the Spanish crown for reductions in tribute obligations (Diel 2008, 130). Thus, the pictorial history changed from being a political argument about the cosmic validity of the past to a chaotic record of the hardships of the present.

The physical nature of the *Tira* itself was even modified in its colonial section, and its manipulated calendric structure was hidden. Though the first page is highly damaged, the original Tira likely began in the year 1 Rabbit (1298) and was made to end in the year 13 House (1557). An addition of paper was made soon after 1557, and the later years were written in a different hand. Thus, in the Tira's original format, Tepechpan's history lasted through five fifty-two-year calendric cycles, a number that may have symbolically referred to the five ages of Mexica creation and the present world, as memorialized on the monumental Calendar Stone. The attachment of paper allowed Tepechpan's history to continue into the later sixteenth century, but the new, less-assured hand here, along with the new content, suggests a fundamental change in historical conception.

TRANSITION IN THE CODEX EN CRUZ

The *Codex en Cruz* (1981), so named because it organizes the four thirteen-year quarters of each fifty-two-year cycle in an unusual pinwheel design, also becomes more

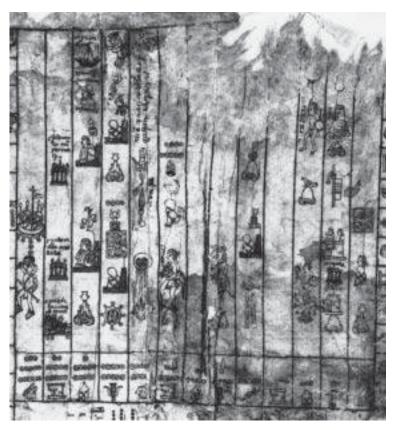


Figure 4.10. The years from 1 Rabbit (1506/1558) to 13 Rabbit (1518/1570), *Codex en Cruz.* Courtesy of the Bibliothèque national de France.

chaotic as time progresses, culminating in the immediate postconquest years. The codex is likely to have been created in the second half of the sixteenth century in the town of Chiauhtla, which was subject to Texcoco before the conquest (Dibble 1981, 59). The codex begins in 1 Rabbit (1402), and the years are presented from right to left with historic events recorded in narrow columns above the year signs. After one thirteen-year quarter cycle, the reader shifts in a counterclockwise fashion to the next thirteen-year quarter cycle, beginning with 1 Reed. After all four quarters are read, ending with the year 13 House (1453), the reader moves to the next fiftytwo-year cycle (1454-1505). This cycle is followed by one final section of fifty-two years (1506-1557). The painter decided at this point to continue his history, but rather than attaching an additional sheet of paper at the end, he reused the year signs and columns of the final fifty-twoyear cycle.

By inserting events for the years following 1558 into an already crowded section, the painter created a rather confusing history (fig. 4.10). Tellingly, this chaotic section is associated with the final years of the preconquest period and the early years of the colonial era, again

suggesting that order gave way to chaos upon the arrival of the Spaniards. For example, at the 2 Reed (1507) representation of a New Fire Ceremony (second column from the right), a subsequent artist added a notice for an event that happened fifty-two years later, in 2 Reed (1559). This artist squeezed a colonial structure topped with the word domolo (for túmulo) between two images related to the New Fire Ceremony from the previous fifty-two-year cycle (Dibble 1981, 57). This addition must reference the imperial catafalque built in New Spain for Charles V in commemoration of his death the year before, in 1558. Additionally, the final section employs more alphabetic annotations, marring the original pictorial nature of the document. It suggests that whereas the Aztec pictorial writing system was sufficient to record preconquest history, it became insufficient for the colonial era.

CONCLUSION

The shift in the pictorial histories considered here, from an orderly past to a chaotic present, must reflect a

general sense of anxiety related to life under Spanish colonial rule. Though clear continuities existed between the Aztec past and the colonial present, as witnessed by the continued creation of painted histories (to provide just one example), we also have evidence of the perception of a breakdown in order, as seen in many of these sources. Thus, the traumas and transitions elucidated by Berdan (1993) were visually manifested in the pictorial histories.

Here I have focused primarily on the year-count histories because it is in these sources that the ordering of the past is clearest, which thereby creates a greater sense of disconnection with the colonial present. While the annals format was associated specifically with Tenochtitlán and meant to communicate the cosmic nature of Mexica history, the continued use of this approach did not suffice under Spanish colonial rule. Hence, we witness a dissolution of order as the records continue beyond the conquest. In general, this change may reflect unease with Spanish colonial rule and also a new function of history. Under both Mexica and Spanish rule, the pictorial histories served as political arguments, but for the Mexica and their subjects, order was imposed on the past to legitimize and bolster one's position in the present. In contrast, under Spanish colonial rule, a high prestige once held in the past could result in advantages early in the Colonial period, but local communities subsequently realized that statements of poverty and sickness were their best arguments for benefits and survival. Ultimately, the pictorial histories continued to be used by the indigenous peoples, but their contents changed accordingly. It is from the changing nature of the histories that we get a better sense of the dislocations the native peoples must have felt as they became Spanish colonial subjects and left the ordered past behind. The historical records were no longer tools for constructing Mexica political power; rather, they had become reactions to and documentations of its loss.

ACKNOWLEDGMENTS

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NOTES

- 1. For the locations of places mentioned here, see map 1.4.
- 2. Barlow (1945) was one of the first to criticize the use of the term *Aztec*, but more recently Smith and Berdan (1996, 4) have supported its scholarly usage in referencing the empire.
- 3. For thorough analyses of the structure of the Aztec empire, see Hodge 1984; and Carrasco 1999; as well as the various contributions in Berdan et al. 1996.
- 4. Most of the major codices date the foundation of Tenochtitlán to 2 House (1325), and this date is also included on the Temple Stone, surely to reference the year of foundation. However, the *Tira de Tepechpan* is unique in dating the foundation later, sometime between 1366 and 1369. Also, the well-known foundation page in the *Codex Mendoza* (1992, fol. 2r) clearly dates the foundation to 2 House, but an associated alphabetic annotation places the arrival of the Mexica in the previous year, 1 Flint (1324), which gives the first ruler of Tenochtitlán pictured in the manuscript, Tenoch, a complete fiftytwo-year tenure in office (Boone 1992, 37). Kirchhoff (1950) doubted the historical validity of a 2 House (1325) foundation for Tenochtitlán and argued that it is more likely to have been founded decades later.
- 5. Many scholars have questioned the historical validity of the Mexica migration accounts (Kirchhoff 1961; Smith 1984; Beekman and Chistensen 2003), while Boone (1991, 142) has proposed that we read the migration accounts not through a Western conception of historical truth but as a metaphor for ceremony or ritual and therefore a record of a deeper truth about Mexica identity.
- 6. The dates of Mexica reigns are not always consistent in the sources. Boone (1992, 5–51) attributes these discrepancies to a number of factors, one being simple scribal error. Moreover, it is not always clear if a source is dating a ruler's reign based on his exact accession date or his first full year in office; the same is true for death dates. Such discrepancies would result in the histories having reign dates one or two years off. Of course, it is also likely that the periods were modified after the fact to make Mexica history fit a more orderly structure.
- Most other sources place the deaths of Moctezuma I and II in 2 Flint (1468) and 2 Flint (1520), respectively, thereby emphasizing the structural symmetry of these two rulers.

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Early European Book Conventions and Legitimized Mexica History in Codex Aubin

Angela Marie Herren



n the late 1550s or early 1560s, a tlacuilo (artistscribe; pl. tlacuiloque) of indigenous descent conceptualized and began work on the hand-painted manuscript now known as Codex Aubin. Like many of the Nahua histories produced in Central Mexico in the decades after the Spanish conquest, Codex Aubin records information in an annals (year by year) format. It includes accounts of the twelfth-century migration of the Mexica people from Aztlan to Tenochtitlán, the history of Mexica rulers who dominated the vast terrain often referred to today as the Aztec empire, and significant events that marked the first half century following Spanish hegemony. The tlacuilo used both indigenous pictographic images and alphabetic Nahuatl text to record these histories, effectively creating a "bilingual" work that could be read by individuals versed in traditional pre-Hispanic writing systems or by Nahuatl speakers who had learned to read and write alphabetic text in their native language. The colonial segment records events related to San Juan Moyotlan, a neighborhood of Tenochtitlán, indicating that the manuscript was likely made for local use.

Although the manuscript incorporates pre-Hispanic history and pictorial writing, the tlacuilo chose to emulate the format of printed and bound books from Europe (codices in the truest definition of the word) that circulated

widely in New Spain. Through a close examination of the manuscript's binding and composition and a comparison with contemporary printed texts, this study demonstrates how the tlacuilo emulated compositional and structural elements of early printed books. The latter part of the investigation places the manuscript in historical context, showing how the tlacuilo's choices reflect sixteenthcentury educational practices in New Spain. This research offers a more nuanced understanding of how and why Codex Aubin was produced. The manuscript reveals a strong impetus to faithfully record canonical pre-Christian indigenous history and a cautious consideration of how to make that history palatable in a sixteenthcentury colonial context. By using sixteenth-century printed books as a model, the tlacuilo lent authority to the pre-Hispanic history he presented.

BACKGROUND

While the details of *Codex Aubin*'s provenance are unknown, the consistency of page layouts, images, and handwriting through the entry of 1591 indicates the work of a single tlacuilo. After 1591, additional hands add to the manuscript, recording dates as late as 1608 (fig. 5.1). For the purposes of this study, I focus on the primary tlacuilo

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Figure 5.1. Codex Aubin, folios 67v–68r. The primary tlacuilo ceases work on the manuscript after 1591. A new tlacuilo with different handwriting and different formatting takes over in 1595, altering the one-year-per-page layout. Photo courtesy of Trustees of the British Museum.

who produced the bulk of the manuscript and made decisions about format and content. I will therefore refer to the tlacuilo in the singular and as masculine since this position was primarily reserved for males. While it is possible that one artist wrote the alphabetic script and another produced the pictographic imagery, this scenario seems unlikely as both images and handwriting change abruptly in 1591. Since the postconquest entries become more detailed in the 1550s and include personal references by 1564, it appears that the tlacuilo began his project around that time and continued to work on it for the next thirty years.

As was customary at the time, the primary tlacuilo never names himself, but he does include some references in the postconquest section of the annals that suggest his identity. Numerous references to the governors of San Juan Moyotlan, for example, indicate that *Codex Aubin* is a product of this sub-altepetl (ethnic state) of Tenochtitlán. Amid entries that discuss the comings and goings of viceroys, archbishops, and the San Juan

Moyotlan community leaders, he notes that he participated in the labor tax, which signals his indigenous descent. Additionally, several references document personal events. For example, he records the construction of his home in 1564. On Monday, May 5, 1567, he reports the birth of a daughter named Juana López.

The whereabouts of *Codex Aubin* after work ceased on it in 1608 are unknown until the early eighteenth century. Since it was made for the San Juan Moyotlan community, it surely remained in the custody of their officials for some time. More than one hundred years later, the Milanese aristocrat Lorenzo Boturini Benaduci acquired it. Early catalogs of his collection indicate that he purchased *Codex Aubin* and many other indigenous manuscripts between March 1736 and January 31, 1743. Boturini was arrested in 1743 in New Spain, and his collection was confiscated and placed in the Royal Treasury. From there it passed through several different government and university offices, eventually reaching the newly formed Museo Nacional in 1826. Various inventories chart the

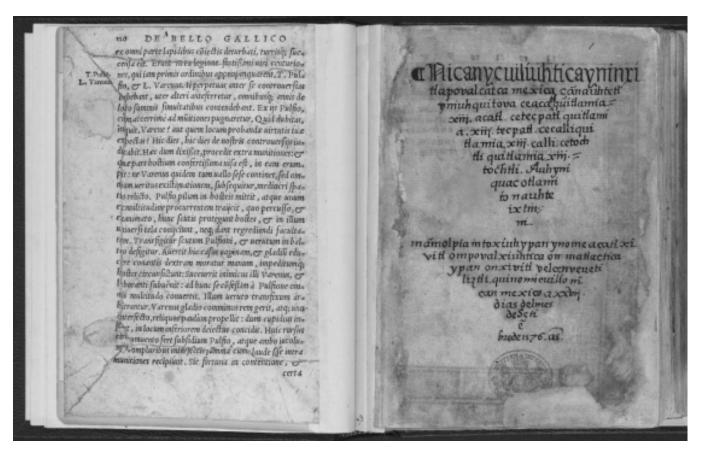


Figure 5.2. The pastedown from De Bello Gallico and folio 1r of Codex Aubin. Photo courtesy of Trustees of the British Museum.

slow dispersal of the Boturini collection. The Parisian Joseph-Marius-Alexis Aubin, for whom the manuscript is currently named, purchased it from an unknown collector in the nineteenth century. Prior to J.-M.-A. Aubin's acquisition, it appears at times in the records as "Codex of 1576," a title that refers to the date listed on the "title page" of the manuscript. While no records indicate how the manuscript left Aubin's possession, the British Museum in London documents its purchase from the French lithographer Jules Desportes in 1880.³ The codex was kept in the British Library until 1926, when it was transferred to the British Museum, where it resides today (ms. no. 31219).

Walter Lehmann and Gerdt Kutscher's 1981 publication, Geschichte der Azteken: Codex Aubin und verwandte Dokumente, helped make Codex Aubin widely available to scholars in the twentieth century. In addition to a discussion of the relationship between Codex Aubin and other manuscripts, Geschichte der Azteken offers scholars a transcription of the Nahuatl text in Codex Aubin with a

German translation and high-quality black and white images. No other significant monographic works have been published on *Codex Aubin* since then, but many scholars have addressed this important manuscript as part of their studies. For example, Elizabeth Hill Boone (1991, 121–51, 2000) has contextualized it in relation to other historical manuscripts and has discussed its narrative qualities. María Castañeda de la Paz (2005, 7–40) examines the relationship between *Codex Aubin* and its source material. Camilla Townsend (2009, 625–50) has recently discussed indigenous historiography, commenting on how multiple sources are employed in the codex. These studies and others have broadened our knowledge of the manuscript.

THE PRINTED BOOK AS A MODEL FOR CODEX AUBIN

Many scholars mention in passing the small book-like format of *Codex Aubin* when discussing its colonial

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properties. Codex Aubin does indeed resemble a printed and bound book in size and in style. It is small and easy to hold in one's hands (15.5 cm high and 13.4 cm wide, or octavo size). 4 The tlacuilo used European paper, included a sizeable amount of alphabetic text, and bound the manuscript like a book. To consider more fully how the European printed book influenced the Codex Aubin tlacuilo, I begin with an examination of the binding (fig. 5.2). This binding incorporates endpapers that are recycled from a sixteenth-century Latin edition of Julius Caesar's Commentarii de Bello Gallico (Commentaries on the Gallic War).5 While it is impossible to definitively determine when it was made, evidence suggests a coeval production, raising the possibility that the endpapers and the book from which they came directly influenced the tlacuilo. Next, my examination of individual page layouts reveals that despite the fact that the codex was created entirely by hand, the tlacuilo mimicked printed books by reproducing the printer's marks, justifying the text blocks, and employing a variety of fonts. These compositional choices reflect a break with earlier pre-Hispanic models. Although the tlacuilo reproduced almost all of the images related to Mexica migration history that one finds in a purely pictographic manuscript like Codex Boturini, he organized the alphabetic writing and pictorial writing on the page so that the latter resembles illustrations in a printed book. Finally, I consider conceptual links to the printed book and ideas of authorship by examining the title page of the manuscript.

Perhaps because of the lack of documentation and available reproductions, the binding of Codex Aubin has not been addressed in previous studies.⁶ Within the red leather binding that the British Library applied in 1969, Codex Aubin is bound with a vellum cover and the previously mentioned endpapers that come from a sixteenthcentury Latin edition of Julius Caesar's Commentarii de Bello Gallico (1534). The Commentarii consists of eight books written by the Roman military and political leader Julius Caesar about his experiences fighting local armies in Gaul that opposed Roman domination in the first century BC. Like Codex Aubin, it is an annals history. The Commentarii has been in print almost since the birth of the printing press in the West, and it was circulated in manuscript form prior to that. The Aubin endpapers are nearly identical to an edition produced in 1534 by Sebastian Gryphius of Lyon, France.⁷ The British Museum has no documentation related to the binding, but the juxtaposition of the painted manuscript and the early printed text invites comparison and consideration of why and how the tlacuilo chose to mimic the printed book format. While the vellum cover and *Commentarii* endpapers may have been added after the manuscript's production, I argue here that it is highly likely they formed part of the original manuscript binding applied in 1576 and that books like the *Commentarii* served as models for the *Codex Aubin* tlacuilo as he worked.

First, this particular binding technique (a limp vellum cover with recycled endpapers) was most common in the sixteenth and seventeenth centuries. In The British Library Guide to Bookbinding History and Techniques, P. J. M. Marks (1998, 44) writes, "Although it was in use much earlier, vellum is often found on sixteenth- and seventeenth-century texts which were sold ready bound," and he describes the virtues of the material: "Vellum or parchment (any skin treated with lime and dried under tension) is strong, light and cheap. The surface is hard, smooth and generally white, although it can be stained any colour." In their Bookbinding and the Conservation of Books, Don Etherington and Matt Roberts (1982, 277) state, "Limp vellum or limp-parchment bindings were used frequently in the 16th and 17th centuries, and were sometimes gilt but were also often not embellished. In later centuries vellum has been more commonly used like leather, that is, as the covering for stiff board bindings." In their discussion of endpapers, the authors comment,

During the first several centuries of the codex, endpapers consisted of little more than two or four leaves of vellum folded and sewn along with sections of the book. When paper became the common material for book production, it then became necessary to reinforce the folds of the endpapers. A common type of endpaper, used in the first part of the 16th-century, consisted of a fold of white paper employing a strip of vellum for reinforcement. The use of printer's waste for the fly leaves of endpapers was not uncommon during the 16th century. (Etherington and Roberts 1982, 91)

Codex Aubin's binding, made from recycled endpapers with a strip of vellum for reinforcement, is entirely consistent with sixteenth-century binding practices.

Just as limp vellum bindings were common in the sixteenth century and fell out of use in the seventeenth century, the use of recycled endpapers was most common in

the sixteenth century. In places where paper was still somewhat expensive, it was not uncommon for bookbinders to recycle paper by using it for endpapers and pastedowns. Later, recycled papers would become less common. In the sixteenth century in New Spain, European paper was imported and was still expensive. By the late sixteenth century, the commodity had become more widely available and less costly as Mexican paper factories began production (Taubert 1976, 221). Furthermore, marbled paper was introduced to Europe in the sixteenth century and quickly became the standard for endpapers of the seventeenth and eighteenth centuries (Marks 1998, 34-35; Etherington and Roberts 1982, 166). If recycled endpapers are a function of paper availability and cost, the Codex Aubin binding probably dates to the mid- to late sixteenth century.

The recycled endpapers used in these early books came in different forms. In his study *Early Printed Books*, E. Gordon Duff quotes from the papers of Henry Bradshaw, a nineteenth-century librarian and historian who makes a distinction between

what may be called respectively binder's waste and printer's waste. When speaking of fragments of books as *binder's waste*, I mean books which have been in circulation, and have been thrown away as useless. . . . But by *printer's waste* I mean . . . waste, proof, or cancelled sheets in the printer's office, which in the early days when printers were their own bookbinders, would be used by the bookbinder for lining the boards, or the centres of quires, of books bound in the same office of the printer who printed them. (Duff 1968, 195)⁸

An example of a bookbinding in the Princeton University Library's Rare Books and Special Collections provides an interesting comparison. Roughly contemporary with Codex Aubin, the 1583 book by William Fulke is titled A Defense of the sincere and true translations of the holie Scriptures in to the English tong and has waste endpapers that are leaves from an edition of the Digesta. The Fulke book, with its imperfectly printed endpapers, provides an example of printer's waste. However, the relatively pristine printed pages of the Commentarii that protect the Codex Aubin manuscript are binder's waste. In other words, they come from a well-printed edition that was probably worn out and discarded. The earliest printers working in Mexico produced primarily religious texts, so Codex Aubin may

have been bound at a location like the Colegio de Santa Cruz in Tlatelolco, where bookbinding was taught.

The limp vellum cover with recycled endpapers was already falling out of use in the seventeenth century, and it is unlikely that such a binding would have been applied in the eighteenth and nineteenth centuries. In the eighteenth century, *Codex Aubin* circulated through many institutional collections in New Spain after the government seized Lorenzo Boturini Benaduci's collection in January 1743. As mentioned previously, it passed through the hands of J.-M.-A. Aubin and Jules Desportes before being sold to the British Museum. In the eighteenth and nineteenth centuries, institutions paid little historical attention to bookbindings and often removed old ones that were damaged, replacing them with blank endpapers and standardized covers. In the 1960s, E. Gordon Duff lamented this practice. He wrote,

In the last century no regard whatever seems to have been paid to old bindings, the very fact of their being old prejudiced librarians against them; if they became damaged or worn they were not repaired, but destroyed, and the book rebound. Nor did they fare better in earlier times. Somewhere in the first half of the seventeenth century all the manuscripts in the Cambridge University Library were uniformly rebound in rough calf, to the utter destruction of every trace of their former history. (Duff 1968, 186)

In the eighteenth and nineteenth centuries there was no shortage of paper, and it seems unlikely that the British Library or any of the earlier owners would have rebound *Codex Aubin* with recycled endpapers or with vellum, as it was already more of a specialty paper. The British Museum stamp appears on the vellum cover as well as on various pages throughout the manuscript, perhaps indicating that it was part of the object as it came into that collection.

The edition of the *Commentarii* that is bound with *Codex Aubin* represents one of the most popular and influential print formats introduced in the sixteenth century. The printer, Sebastian Gryphius, was a German who had worked in Venice and had become the most prominent printer in Lyon. A scholar and Latinist, he was well known for his fine editions. The editions of the *Commentarii* that he produced in the early part of the sixteenth century were reprints of the work of Aldus

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Manutius, the foremost Humanist scholar-printer in Renaissance Italy. Although Gryphius issued his reprints legally, printers had been pirating Aldus's work since the beginning of the sixteenth century. H. George Fletcher, former Astor Curator of Printed Books and Bindings at the Morgan Library and Museum in New York described this as a form of flattery:

Aldus's competitors "honored" him in their own way by pirating his books. Some printers, however, would embrace the enchiridion format as a legitimate tribute to Aldus's creative genius.

The earliest counterfeiting of typography, format, and texts can be found, within Italy, by Soncino in Fano and the Giunti in both Florence and Venice (this, at least, Aldus quashed by lawsuit). Outside Italy, the great commercial center of Lyon was a burgeoning printing locale, and the counterfeiting enterprise was only the beginning of an era that would see Lyon become a dominant location during the first half of the sixteenth century. We should also note that because so many copies of these piracies are still found in contemporary Italian bindings, the Lyonese must have sold into the Italian market deliberately, and this tactic must have been part of their agenda from the beginning. (Fletcher 1995, 55)

Aldus Manutius is perhaps best known for making classical Greek and Latin texts widely available and for introducing in 1501 the enchiridion, or handbook, printed on octavo paper. Handbooks were designed to be held comfortably in the hand and were later incorrectly referred to as "pocketbooks" (Fletcher 1995, 49). This portable format overturned the tradition of heavy tomes and became popular in the sixteenth century because of its convenience and lower cost. Aldus Manutius had made a name for himself as an editor, translator, scholar, typographer, and printer. In the sixteenth century, his books were exceedingly popular in both original and pirate print editions. When the Codex Aubin tlacuilo set to work in the second half of the sixteenth century, he chose to work on octavosize paper and created his own handbook, adopting one of the most widely used print formats of his era. This choice was not at all common for pictographic manuscripts. In John Glass's census of indigenous pictorial manuscripts,

no other work approximates the octavo size; most are considerably larger (Glass and Robertson 1975).

The parallels between Codex Aubin and its Commentarii endpapers clearly demonstrate the impact of early printed texts on this late sixteenth-century tlacuilo. Aside from the octavo size, European paper, binding, and emphasis on alphabetic text, the tlacuilo mimics many of the printer's techniques and marks. He uses justification, capitulum marks, and a variety of fonts. In figure 5.2, one can see paired horizontal lines that appear at the end of some lines in the printed text on the left and the handwritten title page on the right. They function as justification marks used to form the text edge into a neat margin. Such marks are used frequently throughout this edition of Caesar's Commentarii and other early printed texts; the Aubin artist uses them often in his manuscript (fig. 5.3), particularly in the lengthy text passages. In both the Commentarii and the painted manuscript, C-shaped capitulum marks appear often; they serve as precursors to the paragraph indentations that are used today to designate a shift in the text's subject matter (figs. 5.3 and 5.4).

Codex Aubin also mimics works like the 1534 Commentarii by employing a variety of fonts. Figure 5.4 illustrates two details of the Nahuatl word nican (here) that appear in the manuscript. A comparison of the style of the letters of Codex Aubin's plate 1r with the text that follows shows that the artist uses a Gothic style for the opening words and switches to a Roman style for the rest of the manuscript. In Konrad Haebler's study of incunabula, the earliest printed texts, he describes European printers' growing interest in typeface variety:

The custom was developing of cutting types in a great variety of forms. While the earliest printers at first usually printed only with a single size of type, as time went on it became more and more customary to use a great many types of various sizes in the same book. It was not long before certain printers were seized with the ambition to provide themselves with an extensive stock of the most varied kinds and sizes. (Haebler 1933, 88)

The *Codex Aubin* artist would have seen multiple typefaces in the sixteenth-century books circulating in New Spain, and he used this variety for aesthetic purposes in his own work.

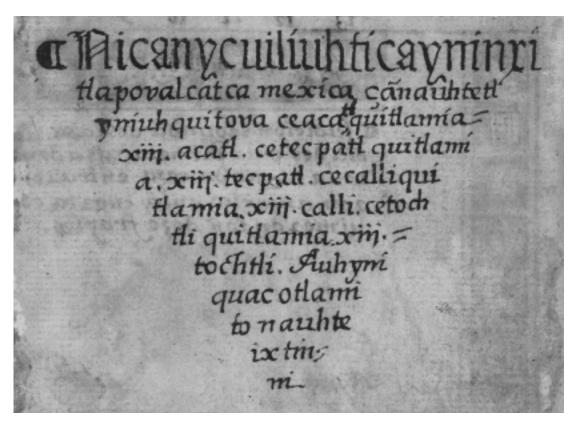


Figure 5.3. Detail of text on folio 1r of Codex Aubin. Photo courtesy of Trustees of the British Museum.

While the *Codex Aubin* tlacuilo mimics the format and composition of a printed text, he does not use printer's marks unless they serve some useful or aesthetic purpose. For example, he does not mimic the headers, signatures, or catchwords that appear on the *Commentarii* endpapers. These marks at the top and bottom of the page helped the printer assemble the book after it was printed on large sheets of paper and cut down, but served no purpose for the *Codex Aubin* tlacuilo, who already had the year dates to signal the proper order of the pages.

In adopting the format of a printed book, the *Codex Aubin* tlacuilo chose to include a title page, a further indication that he conceptualized his work as a European book. Although the title page of the 1534 edition of Caesar's *Commentarii* does not appear in the *Codex Aubin* endpapers, it is typical of Renaissance books and provides an instructive comparison with plate 1r of *Codex Aubin* (fig. 5.5). Both are designed to inform the reader of the contents of the work as well as the date and location of production. Aesthetically, they employ a similar

composition, constructing the text into a decorative inverted pyramid with large font at the top and smaller font at the bottom. The title announces the contents of the book, Julius Caesar's *Commentarii*, with the printer's device and year below. On the *Codex Aubin* plate, the Nahuatl text reads,

Here is written the Mexica year count. It has four parts, as follows: 1 Reed ends with 13 Reed, 1 Flint ends with 13 Flint, 1 House ends with 13 House, 1 Rabbit ends with 13 Rabbit. And when all four are going to end, then our years are bound in the year 2 Reed. Fifty-two years is a complete cycle.

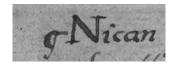
Written here today in Mexico, the 27th of the month of September of 1576. (Dibble 1963, 1)¹³

Since the content is in annals form, recording significant events of Mexica history, the tlacuilo begins by informing the reader of the key components of the Mexica calendar system that are depicted on the following plates. Reproducing the date and the printer's information

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Figure 5.4. Two details of the word *Nican* from plates 1r and 3v of *Codex Aubin*. Photo courtesy of Trustees of the British Museum.



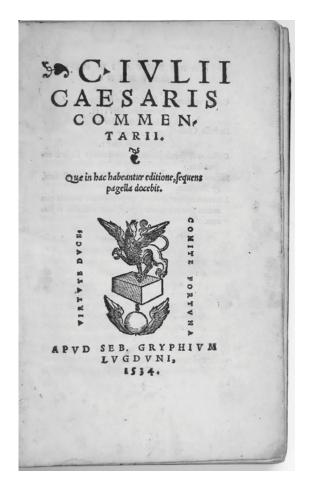


proved more difficult for the tlacuilo because no precedent existed in the indigenous tradition. Both title pages record the date of the book at the very bottom, 1534 for the *Commentarii*, and September 27, 1576, for *Codex Aubin*. While the latter date might refer to the day the tlacuilo created the title page, the manuscript could not have been produced in a single day, and he and others continued to add entries until 1608. Since *Codex Aubin* was not printed and the idea of claiming authorship was foreign, the tlacuilo compromised by obliquely acknowledging the act of creation with the words, "Written here today."

In numerous ways, Codex Aubin evidences the tlacuilo's efforts to convert indigenous content and systems for recording knowledge into the conceptual paradigm of a European printed book. Unlike many contemporary annals that were produced on indigenous fig-bark paper or assembled like a pre-Hispanic screenfold, the Codex Aubin tlacuilo used materials and a format introduced by the dominant Spanish culture. Individual pages are designed to be read like those in a Western book, from left to right and from top to bottom. In contrast, the indigenous tradition allowed for a variety of reading patterns and often organized content in a meander. The small octavo format evoked Renaissance Humanist scholarship and signaled a new context for consumption. In the pre-Hispanic period, tlacuiloque produced pictorial writing that served as a mnemonic device. Trained orators would have elaborated the contents to an audience (Durán 1994, 570). Codex Aubin pairs the pictorial writing with extensive alphabetic Nahuatl text, effectively supplanting the orator's role. The diminutive size of Codex Aubin is suited to an individual reader. Finally, Codex Aubin's binding, though impossible to date definitively, is entirely consistent with sixteenth-century binding practices. The Gryphius edition of Julius Caesar's Commentarii, or works like it, provided direct inspiration to the tlacuilo. His choice of a model reflects the growing impact of the codex, or bound book, in sixteenth-century New Spain.

CODEX AUBIN IN HISTORICAL CONTEXT

The murals that adorn the walls of the Augustinian convento at Actopan in Hidalgo highlight the role of the European codex in intellectual and spiritual life (fig. 5.6). The stairwell murals, painted by indigenous artists in the sixteenth century, depict Augustinian church fathers and important saints, most with an open codex in front of them. The inkwells, quills, and quill holders on their desks imply that the venerated friars were producers as well as consumers of the knowledge contained in these books. If the stairwell murals celebrate the power and possibility of scholarship in written form, the large lunette-shaped mural on the north wall of Actopan's sala de profundis suggests that that power can be dangerous in the wrong hands (fig. 5.7). In the midst of a rocky landscape filled with scenes of the founding of the monastic order, a half-human, half-animal devil creeps up the mountain path with a bound book on his back and a quill and inkwell dangling from his arm (Peterson 2007, 13). As art historian Jeanette Peterson (2007, 17) notes, the tlacuilo depicts the devil as a tlameme, or indigenous porter, who carries his book with a tumpline. Though the possibilities for understanding this provocative figure are multivalent, the image, on at least one level, can be interpreted as a reference to the Catholic Church's ongoing battle against heretical writings, particularly those authored by the indigenous inhabitants of New Spain. The Actopan murals reflect something of the prevailing attitude toward the bound book. Originally written by hand and then produced with printing presses, the codex had become the preeminent knowledge bearer in sixteenth-century New Spain. The ideas contained in these books were powerful, and the Catholic Church maintained that content had to be tightly regulated. The Inquisition carried out this policy by censoring those books that were considered dangerous or heretical. They monitored the printing presses, required ships to list the titles of the books they imported on their manifests, and destroyed or suppressed suspect texts by



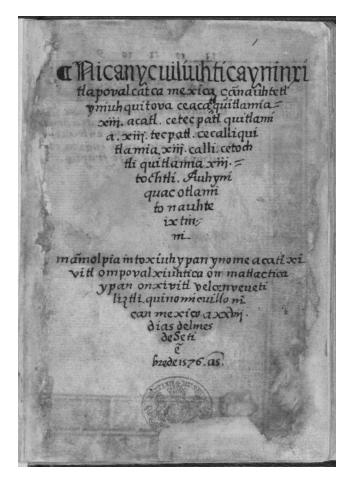


Figure 5.5. On the left, the title page of Julius Caesar's Commentarii (Lyon: Seb. Gryphius, 1534). Photo courtesy of the Charles E. Young Research Library, Department of Special Collections at the University of California Los Angeles. On the right, plate 1r, Codex Aubin. Photo courtesy of Trustees of the British Museum.

indigenous authors. Against this ideological backdrop, the tlacuilo began his training and conceived and produced *Codex Aubin*.

THE EDUCATIONAL ENVIRONMENT

The *Codex Aubin* tlacuilo's ability to write alphabetic Nahuatl and Spanish indicates that he was trained in the Franciscan schools established in the decades after the conquest for the children of indigenous elites. In this educational system, the tlacuilo would have learned to read and write alphabetic Nahuatl, Spanish, and Latin, while studying arts, Christian doctrine, and music (Kobayashi 2007, 174, 180, 185–86, 194–98). Though the alphabetic text in the manuscript is primarily written in Nahuatl, a short

Spanish inscription at the beginning, written in the primary tlacuilo's hand, demonstrates that he was versed in more than one language. The tlacuilo acquired basic reading and writing skills sometime before he began work on the manuscript. His higher education probably occurred before, or concurrent with, the initial production of the manuscript. The entries in *Codex Aubin* become more lengthy and detailed in the 1550s, indicating that the tlacuilo was recording events of the more "recent past" or events that he had experienced. By 1564, he begins to make occasional personal entries like the following: "Monday, the 29th of May [1564], I began my little house. There is a stone image" (fol. 54r). He may have begun work on the manuscript around this time.

Since he notes in 1572 the death of fray Pedro de Gante, who established and taught at the monastery school of

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Figure 5.6. The stairway mural from the Augustinian convento at Actopan, Hidalgo, Mexico. Photo courtesy of Angela Marie Herren.

San José de los Naturales, and makes frequent mention of the chapel of San José, where the school was located, it is likely that the tlacuilo began his studies there.14 After 1530, San José de los Naturales began to focus on teaching practical job skills, including many artistic professions such as painter, sculptor, embroiderer, silver worker, and gold worker (Kobayashi 2007, 195). The tlacuilo may have developed his painting skills at the school. Perhaps he even made the "stone image" or sculpture that decorated his home. He also would have developed a basic knowledge of Spanish and Latin at San José de los Naturales. In sixteenth-century New Spain, the Catholic Masses were given in Latin, and it was considered imperative that students understand the basic prayers and rites. It is unlikely, however, that the tlacuilo encountered at this school the printed books that he would use as a model. At San José de los Naturales, notes historian Michael Mathes (1985, 6), "the only books available were the personal and highly valued property of the friars," which meant that "a substantial part of educational process was involved in the verbatim copying of dictation into bound paper copybooks."

The tlacuilo's interest in emulating printed and bound books probably developed at the Colegio de Santa Cruz in Tlatelolco. This was the first European school of higher education in New Spain, and the Franciscan friars that created it amassed the first academic library there. A highly selective school geared toward children of the indigenous elite, the Colegio only admitted students who had excelled in monastery schools like San José de los Naturales. Students entered at eight to ten years of age with a command of alphabetic reading and writing and a basic knowledge of Latin (Kobayashi 2007, 214, 216). At the Colegio they spent about three years advancing their grammatical skills and command of Latin while studying subjects such as the arts, theology, rhetoric, logic, philosophy, music, and indigenous medicine (Kobayashi 2007, 222). In this setting, students had access to printed books that covered a diversity of subject matter. If the Codex Aubin tlacuilo found his model in this library, it



Figure 5.7. Detail of the devil figure at the center of the lunette-shaped mural in the *sala de profundis* of the Augustinian convento at Actopan, Hidalgo, Mexico. Photo courtesy of Angela Marie Herren.

was probably a Latin text. Since Latin was considered a universal intellectual language and studies at the Colegio went far beyond the rites of the Catholic Mass, the overwhelming majority of books in the library were published in Latin. Students left the Colegio and returned to their home communities before the age of fifteen, unless they stayed on to assist with teaching, administration, or other projects (Kobayashi 2007, 217, 253).

Codex Aubin is also the kind of endeavor that students of the Colegio de Santa Cruz at Tlatelolco developed and pursued, particularly after 1540, when the school became secular and began to focus on linguistic projects. José María Kobayashi (2007, 261) has described this period in New Spain as a time of "historiographic revitalization" born of the encounter between Mexica historiographic traditions and the Latin alphabet. Hundreds of texts were written in Nahuatl in the postconquest period, mostly in the sixteenth century; more than sixty were dedicated to recording memories and knowledge about the pre-Hispanic past (Kobayashi 2007, 261). Well-known authors who studied at the Colegio de Santa Cruz at Tlatelolco

and addressed this history in their writings include Fernando Alvarado Tezozómoc, Fernando de Alva Ixtlilxóchitl, Juan Bautista Pomar, and Domingo Francisco de San Antón Muñón Chimalpain Cuauhtlehuanitzin (Kobayashi 2007, 261). In 1560, around the time the tlacuilo began *Codex Aubin*, Bernardino de Sahagún was working with students of the Colegio on his *Historia general de las cosas de Nueva España*, now known as the *Florentine Codex* (written in Nahuatl with later Spanish translations). Sahagún coordinated production of the latter work, a multivolume history of pre-Hispanic Central Mexican culture, over several decades with the assistance of native informants.

A relationship with the Colegio de Santa Cruz at Tlatelolco, as student or alumnus, also would have made the binding of *Codex Aubin* in the 1570s possible. A 1572 inventory shows that the Colegio had purchased the tools and presses needed for bookbinding and had begun to teach book-related arts (Mathes 1985, 33). Since this was an academic setting rather than a professional printer's office, it makes sense that recycled endpapers would

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Figure 5.8. Detail of the murals at the Augustinian convento at Ixmiquilpan, Hidalgo, Mexico. Photo courtesy of Angela Marie Herren.

consist of binder's waste rather than printer's waste. The Gryphius edition of Julius Caesar's Commentarii de Bello Gallico is exactly the kind of text that might have been available for reuse. Most of the books in the Colegio library were written in Latin, and a substantial number of these were classical texts, considered an important part of a humanistic education (Mathes 1985, 87). Documentation shows that another 1543 edition of Caesar's Commentarii once formed part of the collection (Mathes 1985, 60). Furthermore, Mathes's (1985, 87) analysis of the library inventory shows that at least 102 of the 277 books known to have formed a part of the collection were published in France; fifty-one of these were published in Lyon. These facts are important because the library inventories also reflect significant losses at this time. In his discussion of the Colegio de Santa Cruz's struggles of the 1570s, Mathes (1985, 31) notes that "the library suffered losses from theft, and was also depleted by the sale of books." As he accounts for some of the reductions in the inventory, Mathes (1985, 32-33) quotes Sahagún as stating that the "Indians in the colegio . . . said that some [books] had worn out due to age and others had been lost." If the *Codex Aubin* tlacuilo was an alumnus or had a relationship with the school, he might have had access to some of these worn-out volumes. Alternatively, he could have purchased books from the school; under serious financial hardship in 1574, the Colegio de Santa Cruz sold part of its library (Kobayashi 2007, 247). If the *Codex Aubin* tlacuilo bound his book, he most likely did so in the midst of these developments, in the year 1576, when he produced the title page of the manuscript. If so, he included blank pages so that the annals could be continued.

CONCLUSIONS

Although we cannot know if the primary tlacuilo applied *Codex Aubin*'s binding, it is appealing to imagine him consciously couching his history in endpapers from a Latin edition of Julius Caesar's *Commentarii de Bello Gallico*, one of Renaissance Europe's most compelling

pre-Christian annals-histories. In making a connection between pre-Hispanic culture and Europe's pagan past, the tlacuilo would not have been alone. In his book The Mestizo Mind, Serge Gruzinski (2002) discusses the influences of pre-Columbian imagery, Ovid, and European pagan grotesques on the figures that line the walls of the Augustinian monastery of Ixmiquilpan in Hidalgo, Mexico (fig. 5.8). He suggests that as part of a complicated and multilayered process of Mestizo mélange, indigenous and mestizo artists placed their cultural past in the same context as Europe's pagan past. Like Ovid, who could be read through a Christian filter, and the grotesques that had become decorative elements rather than potent references to actual pagan practice, indigenous Mexican culture and aesthetics could become an admired and accepted part of late sixteenth-century New Spain, placed in a kind of classicized past.

The tlacuilo encouraged his reader to view the viceregal present as an extension of the past. The narrative content of Codex Aubin spans five centuries and draws the pre-Hispanic past, conquest, and postconquest events into one historical continuum, albeit a continuum that at times backtracks and is therefore not always linear. The account begins with the migration of the Mexica people as they follow their supreme deity, Huitzilopochtli. At the end, the annals reflect a world that is dominated by Christianity. Throughout, the tlacuilo presents himself as an unwavering Catholic. In a successful manipulation of the codex format, he manages to convey all of the essential information about Huitzilopochtli's role in the Mexica migration, while highlighting his own steadfast Christianity. While figural images of Huitzilopochtli, or the priests who channel him, appear regularly in Codex Boturini and Codex Azcatitlan, the Codex Aubin tlacuilo eliminates them completely. Rather, this once-powerful Mexica deity is relegated to the alphabetic text, where the tlacuilo could control perception by referring to him as "the devil Huitzilopochtli." By mitigating the role of Huitzilopochtli and using the physical format of a printed book and some of its aesthetic forms, the artist-scribe at once posits his subject matter as "history" worthy of being recorded in a "book" and neutralizes that part of the narrative that at one time had significant ritual

As the tlacuilo drew inspiration from pictographic manuscripts and printed books, he struck a balance designed to persuade his audience to accept the legitimacy of his work. As a historian trying to preserve something of the past, he chose to retain pictorial writing in his manuscript, rather than produce a purely alphabetic text. Likewise, he recorded the pre-Hispanic narrative content of his sources with great fidelity. He responded to some of the primary threats to his project, like church censorship, with innovation. Drawing on his education and the availability of new materials, he created a hybrid work meant to build on the legitimacy and prestige of European codices. In 1576 he produced a title page. If he went to the trouble to add this component, he probably also sought to have the work bound using the resources and technology available to him in sixteenth-century New Spain. If he selected pages from Caesar's Commentarii as his endpapers, perhaps he hoped to stimulate a new ideological framework by inviting comparison between Europe's classical pagan past and the pre-Christian past of his own ancestors. Regardless, the tlacuilo's work represents a negotiation between the perceived legitimacy of pre-Hispanic and European modes of expression and communication that elevated the pre-Hispanic source through its use of the European models.

NOTES

- 1. While the term Aztec is commonly used in North American scholarship to refer to the indigenous group that dominated Central Mexico between the fourteenth and sixteenth centuries, it is a misnomer. It correctly applies to the original inhabitants of Aztlan. The descendants of the Aztecs who came to dominate the political structure in Central Mexico as Cortés encountered it identified themselves as "Mexica." For a detailed discussion of these terms, see "Preface: Notes on Terms and Usage" in Herren 2005, vi–xvi. For maps showing the location of Tenochtitlán, see maps 1.4a and 1.4b.
- For a thorough discussion of the documents that chart Codex Aubin's trajectory, see chapter 2, "Tracing the Manuscripts through Time: A Collection History," in Herren 2005, 23–45.
- The records misspell his name as "M. J. Des Portes." Jules
 Desportes produced lithographic reproductions of many
 of Aubin's manuscripts, and perhaps he received *Codex Aubin* as payment.
- 4. In early printing practices, designations like *octavo*, *cuarto*, and *folio* referred to the number of pages printed on a standard sheet. Octavo printing produced eight pages, front and back, on a standard sheet that was then folded three times to create a gathering of eight leaves or sixteen pages.
- 5. "Endpapers" are the few leaves placed in the front and back of the book, between its covers and the text block.

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- The leaf closest to the cover is called the "pastedown" or "board paper."
- 6. The British Museum has recently made high-resolution color images of the manuscript available to the public on their website. For the first time, one can easily access fullcolor reproductions of each page of the painted manuscript and a few images of the endpapers that protect it.
- 7. The endpapers that surround *Codex Aubin* do not have a title page. The edition can be identified, however, by comparing the size of the page, language of the text, type, number of lines per page, headers, signatures, catchwords, etc. A selective examination of the British Library's four hundred volumes of the Commentarii de Bello Gallico indicated that this was clearly an early Latin edition and that it was most similar to those books published by Aldus Manutius in Venice in the sixteenth century. I did not find a close match until I visited the Aldine collection at the University of California at Los Angeles, which consists of books published by Aldus Manutius and his followers. The book that most closely resembles the Codex Aubin endpapers is an Aldine reprint produced in 1534 by Sebastian Gryphius of Lyon, France. Page 117 of the Commentarii de Bello Gallico, for example, is identical in the 1534 book and the Aubin endpapers. Page 120 is identical except that the catchword has been shortened on the page in the Aubin endpapers. An examination of the Gryphius collection at the John Rylands Library in Manchester indicated that Gryphius's editions of the Commentarii de Bello Gallico changed format in 1545. Thus, the pages that surround *Codex Aubin* appear to date between 1534 and 1545.
- E. Gordon Duff, quotes from Henry Bradshaw's Memoranda, No. 5, Notice of the Bristol fragment of the Fifteen Oes:—. In the latter half of the nineteenth century, Henry Bradshaw (1831–1886) worked with the book collections at Cambridge University Library.
- For an image of the book, see http://libweb5.princeton. edu/visual_materials/hb/cases/endleaves/index.html.
- 10. For a complete list of where the Boturini collection was held, see chapter 2, "Tracing the Manuscripts Through Time: A Collection History," in Herren 2005.
- 11. The British Library website, for example, discusses this problem in relation to their eighteenth-century collection of Sloane's printed books: "In many cases, evidence of identity was lost by the early practice of binding or rebinding in a Museum style which involved removing the preliminary leaves where Sloane's identification marks are often found" (British Library Board n.d.). See http://www.bl.uk/catalogues/sloane/History.aspx.
- 12. Although the British Museum owned the manuscript, the British Library handled its binding requests. It is also worth noting that, unless completely destroyed, a 1534 edition of the *Commentarii* would have been something

- worth keeping or selling in one of the many duplicate sales the British Library had in the nineteenth century. By contrast, in the late sixteenth century, a 1534 octavo edition of the *Commentarii* would have been fairly common and not old enough to be considered rare.
- 13. All translations from Codex Aubin are English translations of the text found in Charles E. Dibble's (1963) publication. Translations provided by Deborah Nagao, with the assistance of Alfredo López Austin and Leonardo López Luján. I would like to thank the latter for their clarifications of certain passages.
- 14. "Our beloved father fray Pedro de Gante was buried today, Sunday, April 20" (fol. 58r).
- 15. According to Mathes (1985, 87), of 277 books known to have formed part of the library at the Colegio de Santa Cruz in Tlatelolco, 255 were Latin, 20 Spanish, 1 Italian, and 1 Nahuatl/Purépecha.

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PART TWO

Oaxaca

Dynasty and Hierarchy in the Tombs of Monte Albán, Oaxaca

TELL ME YOUR NAME

Alfonso Arellano Hernández



In memoriam

Beatriz de la Fuente (1929–2005),
for her many teachings
Ma il mistero è chiuso in me,
il nome mio nessun saprà; no, no.
Sulla tua bocca lo dirò
quando la luce splenderà

—Giacomo Puccini, *Turandot*, Act III, "Nessun dorma"

hroughout human history the names of people who have had a major impact—Alexander the Great, Cleopatra VII, Pakal II, Charles V, Moctezuma Xocoyotzin, and Mao Tse-tung—have been celebrated. In the particular example of pre-Hispanic Oaxaca, it is important to mention Lords 8 Deer Jaguar-Claw and Cociyoesa. Certainly, personal names reflect the cultures of those who bear them, providing social confirmation and, therefore, identity. Thus, it is meaningful to investigate the significance of the Classic period Zapotec names that can be deduced from the records found in the mural paintings of tombs.

First, it is necessary to review the well-known concept of names derived from the calendar. According to this convention, a person received his or her first name from the day of their birth, which was taken from the *pije*, or ritual cycle of 260 days. This name marked their entire life

because they were influenced by the fate—the vital essence or burden—of the day, whether that be bad, good, or neutral. This created an irrevocable, sacred connection that meant names were never spoken. They were secret, taboo, magic. If anyone wanted to harm someone else, it was (and is) sufficient to say the complete calendrical name of the individual and curse him or her. Colonial sources confirm that to avoid danger, people did not usually include the number of the day and slightly altered the name itself, as in the case of Pedro and its diminutives Perico, Periquillo, Perote, and Pedroche. Similarly, *cipactli* (saurian) became *cipac* (Córdova [1578] 1942, 203; Sahagún [1829] 1989, lib. 4, passim). The pije was an important part of baptisms in the central valleys of Oaxaca, even in the middle of the twentieth century (Weitlaner 1958, 299).

A person was not only named according to the calendar. He or she had another name that could be spoken in



Figure 6.1. Lady 10 Flower Rainy-Spiderweb, Codex Selden, page 8. Unpublished color drawing by Alfonso Arellano Hernández (2015), based on Caso 1969, 8.

public and is referred to by some scholars as a nickname (sobrenombre in Spanish). Most evidence indicates that this appellative was given to children when they were about six years old or sometimes with the beginning of puberty—at about thirteen to fifteen years of age. Therefore, one can speak of the Ladies 6 Monkey Serpent-Quechquémitl and 10 Flower Rainy-Spiderweb (fig. 6.1), as well as Lords 8 Deer Jaguar-Claw, 7 Reed Flint-Snake (Itzcóatl), and 1 Deer Fasting-Coyote (Nezahualcóyotl). Nicknaming is a general Mesoamerican custom, shared by Mixtecs, Aztecs, and many other people. What else do we know about the Zapotec customs for naming people?

COLONIAL OAXACAN EXAMPLES

The earliest data are found in the writings of friars and the *Relaciones*, from around 1579 (Acuña 1984, passim). The most important sources pertaining to Zapotec Oaxaca are *Arte del idioma zapoteca* (Córdova [1578] 1942), the *Relación auténtica de las idolatrías, supersticiones, y vanas observaciones de los indios del obispado de Oaxaca* (Balsalobre [1656] 1988), and the vast *Geográphica descripción* . . . (Burgoa [1674] 1934). For study of the Mixtec area, an essential resource is the *Arte en la lengua*

mixteca (De los Reyes [1593] 1976). In Córdova one reads the following general traits:

Appellative or common names of people are neither imposed nor taken from lineage, but they take them from the day of their birth. . . . And these days and signs, some are considered good and others, evil and bad. These days and names served for many things related to the life of the people. The first: they served for birth, for as the day had its name, so they [the people] named the boy or the girl that was born on it [the day], and this was his/her principal name, although they had another. . . . 3

And each one of those animals, that were twenty, had thirteen numbers; and even though all those thirteen numbers were one thing in themselves, they distinguished them with adding or taking away letters, and with altering the numbers, as follows.⁴ It is as if we were to say: Pedro four and Perico five, and Periquillo six, and Perote seven, and Pedroche eight. All of these signify this name Pedro, but in different ways, and this because of the variation in letters and numbers as appears here. (Córdova 1942, 17, 203)

FINGER	SON	DAUGHTER	BIRTH ORDER
right thumb	yobi or yopi	zaa	1st
right second finger	tini or teni	xoñi	2nd
right third finger	tixi or texi	niyo	3rd
right fourth finger	payo or xayo	laxi	4rd
right little finger	yopiye	zee	5th
left thumb?	teiye	zayee	6th
left second finger?	texiye	_	7th

Table 6.1. Names and birth orders of Zapotec children

Balsalobre ([1656] 1988, 32) repeats the previously mentioned data. He also offers a list of twenty-six people named in Zapotec. We find Gabriel and Agustín Coxó, Alonso Pérez Guesèe, Baltazar Ramírez Xáa—pupil of Marcos Xèe—Diego Guachilla, Diego Yaguila, Felipe Guelaláa, Lorenzo Nachinaa or Lachinaa, Lucas Pedro Guesecho or Guesechi, and Tomás Laa. We note that with the exception of *Diego Guachilla* (6 Crocodile), these are nicknames, not calendrical names.

By the beginning of the eighteenth century at Villa Alta, testimony given in an idolatry trial against some Indians provides some novelties:

All those of his town do not call their children by the names of the saints that they give them during the Holy Baptism, but by the names of animals that Gerónimo López gives them, which are *tie-tio-beag-bayo* and others that [he] gives to women: *saa-xoni*. Asked about what those names signify, he [the witness] said that *tie* is deer, and *tio* is lion, and *beag* is squirrel, and *bayo* is boar-pig, and what *saa* is, he knows not, nor *xoni*. (De la Fuente 1949, 105)⁵

Of course, the witness translated the Zapotec words ambiguously. These terms deal with the order of birth and the sex of the children, and also they involve the fingers, beginning with the right thumb and ending with the left little finger (Córdova [1578] 1942, 212–14; table 6.1).

Gerónimo López speaks of the fourth son and the firstborn and second-born daughters; perhaps he also includes the second and third sons (Córdova [1578] 1942, 212–14). A will dated 1789 offers the calendar names of the caciques of Solaga (De la Fuente 1949, 111): Belachilla, Quialaana, and Yalao Lachixoza. These can be translated as 3 or 9 Crocodile, 1 Death, and 1 Flower. The last one

includes the nickname Lachixoza, which perhaps means "Field of Branches."

The information related to the Mixtecs is almost the same. The Relación de Xaltepetongo points out, "This town, in the age of their infidelity and when the Spaniards came to it, belonged to a Mixtec lord named Yaxixaayo, which means 'Lord [10] Rabbit' in Spanish" (Acuña 1984, 150).6 In that of Tanatepec, one reads, "Before the Spaniards came, they [the Indians] had in this town as natural lord an Indian named Iztetecoana, which means 'Great Lion Claw', who resided outside this town, in the town of Tilantongo" (Acuña 1984, 157).7 And the Relación from Cuicatlán notes, "Before the Spaniards came to conquer this New Spain, the lords of this town obeyed the Mexicans, and when the Mexicans subjugated it, the Lord of this settlement was Tiñaña, who had this name in his own language, and in the Mexican [Nahuatl] he was called Tecuantecutle, which in Spanish means 'Captain Lion" (Acuña 1984, 167).8

The last quote refers to a ruler Jaguar-Claw, Tiñaña or Tecuantecutle, in other words, his public name but not his calendrical one. Interestingly, the second quote mentions Lord Iztetecoana of Tilantongo, who was undoubtedly 8 Deer Jaguar-Claw, Ñunacuaa Tiñaña. On account of this kind of data, it is possible to compare Zapotec names and to formulate general guidelines for studying the Classic period. In other words, this information corroborates two tendencies regarding calendrical names: (1) they are not divulged due to their deeply sacred quality; (2) they are included in legal documents imbued with sanctity whose aims are, for example, to justify the right of the caciques to rule and possess wealth or to reaffirm the sacredness of their lineage. Texts were used to establish affiliation, as well as family, social, and political identity.

Lastly, it must be remembered that in Zapotec, as well as in other indigenous languages, particular affixes qualify numbers. Some refer to the past (*co-*), some to the future (*hue*), and others to material characteristics. These indicate whether things are long, short, bulky, flat, tall, thin, circular, quadrangular, concave, and so forth. For example, numbers that precede days (*quia-*, *pil-*, *pela-*, *nel-*) refer to tortilla-shaped things.

THREE TOMBS, THREE FAMILIES FROM THE PRE-HISPANIC ERA

A great majority of the Zapotec names known from the Classic period come from the central valleys, especially from the Monte Albán archaeological remains (see map 1.5 for the location of the settlement). Of particular interest to this investigation are the wall paintings found in the tombs, which provide an overview of appellative glyphs of both the sacred calendrical and public types. Of a total of seventeen painted tombs, eight have remains that are more or less complete (Tombs 7, 10, 72, 103, 104, 105, 112, and 125). Outside the metropolis are other painted graves in El Rosario Huitzo (Tomb 1), Lambityeco (Tombs 6 and 11), San Pedro Jaltepetongo (Tomb 1), Suchilquitongo (Tombs 4, 5, and 6), Xoxocotlan (Tomb 3), Yucuñudahui (Tomb 1), and Zaachila (Tomb 1).9

Of special interest are Tombs 103, 104, and 105 at Monte Albán, which date from around AD 400-650. In this study I propose preliminary readings of the nominal glyphs and nicknames found there. It is significant that the three tombs belong to elite residences, a common pattern at Monte Albán. Through the Classic period, elite inhabitants decorated their sepulchers with painted murals and furnished them with exquisite items. However, the main goal was to portray their lineages and their founders, as well as to commemorate the members of the dynasty by painting calendrical and noncalendrical (nickname) glyphs or by sculpting them on slab stones that served as doors. It is also noticeable that these painted glyphs are unique within the entire corpus of Zapotec epigraphy; they are not to be found twice in either painted or sculpted form. Therefore, analysis becomes quite difficult due to the lack of epigraphic texts that allow direct comparisons. As noted previously, comparisons can be made with the Mixtec codices, but only in terms of broad Mesoamerican similarities.

Fragments of a Family in Tomb 103

Tomb 103, found intact and excavated by Alfonso Caso in 1937, is the largest grave in the North Platform. Its flat (not vaulted) ceiling and ceramic offerings (several with traces of polychrome painting) signal construction between AD 550 and 650. The tomb sheltered the bones of two people. Caso saw painted glyphs, which he considered to be contemporary with Tomb 104, but these have faded away. We know the glyphs from drawings included in Caso's (1938) report (fig. 6.2). On the facade, over the entrance, the number 3 and remains of Glyph M, *pelaquij*, or 3 Lightning [Wind], were recorded. However, due to its location, perhaps the text did not refer to an individual's name.

On the north wall were—from top to bottom and left to right—the following glyphs:

Nelaa: 8 Reed, Year Bearer Pillaa or Pelalaa: 2 or 3 Reed

Pelalache: 3 Jaguar

On the south wall:

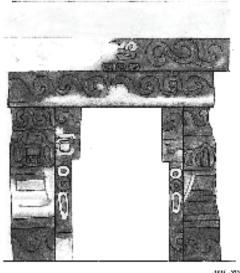
Pillòo: 2 Monkey Pelaquij: 3 Lightning

Nelaala: 8 Owl Pelalachi: 3 Iguana Quianaa: 1 Maize Pelachina: 3 Deer

Other texts are now lost or survive only as fragments. Therefore, I regard the aforementioned glyphs as probable references to close ancestors of the last inhabitant of the tomb. Nevertheless, deterioration prevents further analysis.

An Incomplete Family in Tomb 104

Tomb 104, which was also intact when it was excavated by Martín Bazan in 1936 (Caso 1938, 125), can be interpreted in more than one way. Archaeological data indicate that it was occupied only once, by an adult male who was forty to fifty years old. The funerary offerings led to the conclusion that this tomb was built, painted, and occupied between AD 600 and 700, probably some years later than Tomb 103. Paint drips show that the color was applied hastily.¹⁰



gert vogs

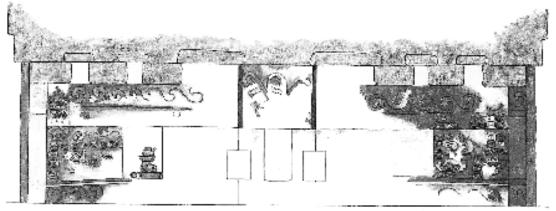


Figure 6.2. Tomb 103, Monte Albán. Unpublished color drawing of reconstructed mural paintings by Alfonso Arellano Hernández (2015), based on Caso 1938, plano 15.

The written texts suggest a date of either AD 628-642 or AD 680-694, probably related to the life and burial of the deceased lord. Two main individuals are depicted on the longest walls. One of them is old and one is young, and they are accompanied by several glyphs and images (fig. 6.3). The reading of the glyphs follows the boustrophedon order, starting at the bottom right with respect to the viewer and moving upward from right to left.

On the back wall, we see the founder of the lineage, Bigola Pecixòo Peciloó Niguijo (Lord Grandfather 5 Earthquake 5 Face). On the wall on the right (south) side, two names are painted: Yobi Pillaa Niguijo (Firstborn Lord 2 Lightning) and Tini Pecizee Be'ellalubi (Second-Born Son 5 Serpent Exhaling-Snake). I am certain that this is the old man, Tini Pecizee Be'ellalubi, who is painted next to the entrance of the chamber (inside it).

On the left side of the tomb, three names are registered: Tixi Quelaala Guelabedxi (Third-Born Son 6 Night Screeching-Owl), Payo Peciquij Todxi (Fourth-Born Son 5 Sharp Lightning), and Yopije Quiaguechi Niguijo La'dxicho'ogu (Fifth-Born Son Lord 1 Iguana Slashed-Heart). This man, Lord 1 Iguana Slashed-Heart, is depicted as a young person; perhaps he was the father of the only inhabitant of the tomb. Another possibility is that it represents the decedent as a young man.11

In any case, I am convinced that the unit shows a tijacoqui, or lineage of great lords, which is represented here through the male line. In other words, no women



Figure 6.3. Tomb 104, Monte Albán. Reconstruction, Oaxaca Room, Museo Nacional de Antropología, Mexico City. Photo by Miriam Mejia (August 2014), published with her kind permission.

are shown. Thus, if my working assumption is correct, it appears that this tomb refers to a marriage between a family of principal men and one of lesser women. This would explain why no known images or glyphs show women, who evidently were not regarded as worthy of inclusion. Urcid Serrano (2008, passim) has also commented on this custom of hypogamy.

Family Changes Recorded in Tomb 105

Lastly, I consider Tomb 105. It is part of the most impressive architectural complex outside the Monte Albán Main Plaza because of its dimensions and closeness to a ball court. The tomb was discovered in 1937 by Caso, who dated it as Late Classic, AD 650-1000, which is contemporary with the palace discussed previously (Caso 1938, 127). Two main features of the burial chamber can be identified. The first of these is its cruciform floor plan; the lateral niches were almost transformed into small rooms. Secondly, the walls were painted at least four times, with indications of alternating sexes and names for some of the individuals (De la Fuente 2005, 84). The personal name glyphs distinguish nine couples, with both men and women shown. As I have previously stated, the painted glyphs are unique, and Tomb 105 neatly exemplifies this assertion.

The repainting of this burial chamber is the result of at least four successive uses and of changes in the record of the main lineage of the heirs. The alterations are most conspicuous on the jambs and the back wall of the tomb (affecting ten of eighteen individuals). This makes it difficult to identify the persons named by the glyphs. Accordingly, I will only comment on the remaining eight images, painted on the long walls, from the niches to the entrance. These figures, men and women who are shown as pairs and probably form marriage partners, appear to be leaving the tomb (figs. 6.4 and 6.5). Their accompanying glyphs are to be read from top to bottom and in boustrophedon fashion from one wall to the other. Alternating from male to female, they register both calendrical names and nicknames.

The lineage founder is 13 Monkey: Bigola Picigolòo Niguijo (Lord Grandfather 13 Monkey). Three couples, with alterations made by repainting, follow:

Xonaxi Piñolòo Dxoba': Lady 12 Monkey Maize (right wall)

Coqui Netella Cocijo Dxoba'gue': Lord 8 Knot [Dog] Thunder Blue Maize (left wall)

Xonaxi Quianiza Dxoba' Chonatani: Lady 1 Water Maize 3 Mountain . . . (left wall)

Coqui Nelaquij Dxoba': Lord 4 Lightning Maize (right wall)

Xonaxi Nelatella Dxoba': Lady 4 Knot [Dog] Maize (right wall)

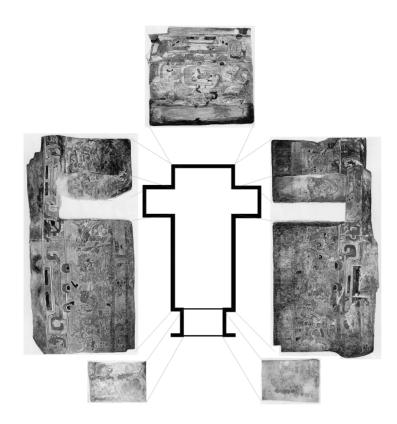


Figure 6.4. Tomb 105, Monte Albán. Drawing of a plan with flattened walls by Alfonso Arellano Hernández (2015), based on Caso 1938, plates II-A, II-B, III, IV, V.

Coqui Quiaxòo Dxoba'xòo: Lord 1 Earthquake Trembling Maize (left wall) Xonaxi Pillaxòo Xica Guichadu'ubi': Lady 7 Earthquake Feathered-Hair (right wall) Patojo-Vessel (left wall) Coqui Pelagolòo Quijo: Lord 3 Monkey Thunder (right wall)

The last couple lacks the probable Maize family name, which raises a question. Does this suggest a change of lineage (referred to by scholars, including Caso [1938, passim] and Urcid Serrano [2008, passim]) that motivated the revisions of the paintings? If this is the case, perhaps surviving relatives ordered the changes to the six figures in the rear part of the grave. They may have justified the interment of a new family in the tomb and established connections with the founder through bloodlines. Another interpretation that is persuasive to me is that this could be an example of a marriage allegiance between lineages of the same hierarchical level, which Urcid Serrano (2008) calls isogamy. In this circumstance, both men and women were equally noble, which gave sufficient reason to represent the entire family. Also, Tomb 105 demonstrates that women adopted the surnames of their husbands (here, the Maize family).

Still to be resolved is the matter of why the last couple, Xonaxi Pillaxòo Xica Guichadu'ubi' and Coqui Pelagolòo Quijo, are not connected with the Maize family. Another outstanding concern is whether the adoption by wives of their husbands' surnames could have come as a result of Spanish influence.¹²

CONCLUSIONS

My effort to read and speak the names of the distinguished members of a tijacoqui is far from complete. The explanations that I have offered here are preliminary, requiring further exploration over the long term, as a better understanding of Zapotec epigraphy develops. Nevertheless, it is possible to summarize some ideas.

Funerary mural painting deals with dynastic images and names of specific persons who were members of very illustrious families. Usually, the founder of the lineage—probably a man—is depicted on the back wall, and his successors are shown on the long walls, commonly arranged as marriage pairs. This organization indicates a high level of interest in marking family



Figure 6.5. Tomb 105, Monte Albán. Unpublished line drawing with flattened walls assembled by Alfonso Arellano Hernández (2015), based on Caso 1938, plates II-A, II-B, III, IV, V.

origins, in order to verify individual and group identities (figs. 6.6 and 6.7). Although neither faces nor bodies convey individuality, we can recognize particular people through their dress and nominal glyphs, which may be either their calendrical appellatives or nicknames. Thus, it seems appropriate to refer, as I have done, to the Ladies Piñolòo Dxoba' (12 Monkey Maize) and Quianiza Dxoba' Chonatani (1 Water Maize 3 Mountain) and to

the Lords Nelaquij Dxoba' (4 Lightning Maize) and Yopije Quiaguechi Niguijo La'dxicho'ogu (Fifth-Born Son Lord 1 Iguana Slashed-Heart). In the same way, names suggest examples of marriage between men and women of lesser or equal status and also the adoption by women of their husbands' family names. In this I follow Urcid Serrano's (2008) recognition of hypogamy and isogamy.

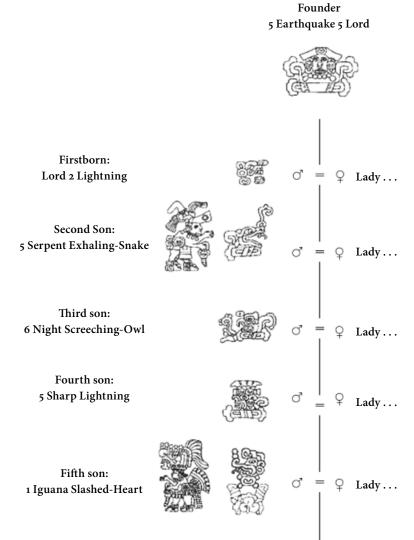


Figure 6.6. The hypothetical birth sequence of the persons mentioned in Tomb 104, Monte Albán. Unpublished line drawing by Alfonso Arellano Hernández (2015), based on Caso 1938, plate I.

Founder 13 Monkey Sr. 12 Agua Parlante Lord 1 / 7 . . . ? Lady 5 Earthquake? Lady 12 Monkey Maize Lord 8 Knot Thunder Blue Maize Lady 1 Water Maize 3 Mountain Lord 9 Lightning Maize Lord 1 Earthquake Trembling Maize Lady 4 Knot Maize Lady 7 Earthquake Feathered-Hair Lord 3 Monkey Thunder Lady 5 Deer Necklace? Lord 2 Jaguar Exhalating

Figure 6.7. The hypothetical birth sequence of some of the persons mentioned in Tomb 105, Monte Albán. Unpublished line drawing by Alfonso Arellano Hernández (2015), based on Caso 1938, plates II-A, II-B, III, IV, V.

The power of names is such that their sacred essence expands, creating a vital force that transcends temporal, geographical, and cultural distances. In fact, it is known that only that which is named exists and occupies a place in the cosmos; those that were, are, and will be are named. Hence, past, present, and future become one within the universe. To speak of such names renews ancient existences. It makes these humans participants in the universe once again, allowing them to share endlessly the indissoluble and invisible ties that unify humankind, past and present. It is when all of us have the privilege of participating in such bonds that we know we are not alone. Despite the intervention of time and space, the names that preserve memories of some of the most powerful and elite members of pre-Hispanic Zapotec society also connect them with us.

ACKNOWLEDGMENTS

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NOTES

- I use the word saurian because the mythical cipactli has not been totally identified. It has been said that it represents a huge lizard, a crocodile, a monstrous fish (sometimes a shark), and even a pejelagarto, an ancient fish resembling a reptile.
- 2. *Aztec* should be understood as a general term that includes language and cultural traits, which is applied to the ancient inhabitants of the Basin of Mexico.
- 3. "Los nombres apelativos o comunes de los hombres no son impuestos ni tomados de alcuñas, sino tómanlos del día en que nacen. . . . Y estos días y signos a unos tenían por buenos y a otros por aciagos y malos. Estos días y nombres servían para muchas cosas tocantes a la vida del hombre. Lo primero: servían para los nacimientos porque como tenía el nombre el día, así llamaban al niño o niña que en él nacía y este era su principal nombre aunque también tenían otro."

"Y cada uno de aquellos animales, que eran veinte, tenía trece nombres, y aunque todos estos trece nombres eran en sí como una cosa diferenciábalos con les añadir o quitar letras, y con mudarles los números, como parece adelante. Como si dijésemos: Pedro cuatro y Perico cinco,

- y Periquillo seis, y Perote siete, y Pedroche ocho, que todos significan este nombre Pedro, aunque en diferentes maneras, y esto por les mudar letras y números como aquí parece."
- 4. Córdova uses the word nombres instead of numbers. In the sixteenth and seventeenth centuries, the Spanish word nombres (commonly "names") was another way to say números (numbers). In French also, nom means "name," and nombre means "number."
- 5. "Todos los de su pueblo no llaman a sus hijos con los nombres de los santos que les ponen en el Santo Bautismo, sino los nombres de animales que les pone Gerónimo López, que son tie-tio-beag-bayo y otros que le ponen a las mujeres: saa-xoni. Preguntado qué significan estos nombres dijo que tie es venado, y tio es león y beag es ardilla y bayo es puerco jabalí, y que saa no sabe lo que significa, ni xoni."
- 6. "Fue este pueblo, en tiempo de su infidelidad y cuando a él vinieron los españoles, de un señor mixteca que se decía Yaxixayo, que quiere decir este nombre en español 'Señor [10] Conejo' en castellano."
- 7. "Antes que los españoles viniesen, tenían en este pueblo por señor natural a un indio que se decía Iztetecoana, que quiere decir 'uña de gran león', el cual residía fuera de este pueblo en el pueblo de Tilantongo."
- 8. "Antes que los españoles entrasen a conquistar esta Nueva España, obedecían los señores de este pueblo a los mexicanos, y al tiempo que los mexicanos lo sujetaron era señor de este pueblo Tiñaña, que tenía este nombre en su lengua propia, y en la mexicana se decía Tecuantecutle, que en la castellana quiere decir 'capitán León.'"
- 9. For more data and interpretations dealing with these examples, see De la Fuente and Beyer 2005.
- 10. Caso thought the glyphs showed Teotihuacán influence, but his assumption lacks support because no such glyphs have been found in that great city.
- 11. The person who was interred may be named on the stone used as the door to the tomb.
- 12. Jorge Angulo (personal communication, 2005) mentioned this possibility and also encouraged me to look for colonial information concerning name changes by women. However, it seems unlikely that this list of names was influenced by European practices because the tomb predates the arrival of the Spanish by several centuries.

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The Divine Right to Hold Power in the Mixtec Capitals of Monte Negro and Tilantongo

Manuel A. Hermann Lejarazu



ithin the study of Mesoamerican manuscripts, one of the newest research specialties focuses on the Mixtec codices. Only sixty-eight years have passed since the seminal work by Alfonso Caso, El Mapa de Teozacoalco, was published in 1949. His investigation, which has now received the attention of many scholars, proposed an ethnic affiliation for this manuscript. We owe a clear debt of gratitude to Caso because he explained many aspects of this general type of document. Nonetheless, although he studied some primary themes (e.g., toponyms, genealogies, and calendars) with definitive results, several issues remain unresolved. Thus, it is worthwhile to review what has been achieved since 1949 and what is yet to be done.

Toponyms have received the most attention in the study of the Mixtec codices, from the earliest interpretations of Alfonso Caso (1949) and Mary Elizabeth Smith (1973) through the proposals of John Pohl and Bruce Byland (1990, 113–31) and Maarten Jansen and Gabina Aurora Pérez Jiménez (2005). The analysis of place-name glyphs has become one of the supporting pillars of codex interpretation. Mixtec toponymic glyphs are considered key to the understanding of the political and territorial scenarios depicted in pictographs. Moreover, they are part of our overall understanding of the political and social organization of the Mixteca in the Late Postclassic period (AD 1200–1521). Of the numerous analyses carried out to associate the

glyphs of towns, settlements, or communities with particular geographic locations, however, only some of the interpretative proposals have survived the passage of time and other researchers' interpretations.

The first toponyms to be fully identified and verified beyond doubt were the glyphs of Tilantongo and Teozacoalco, both studied by Caso over his entire career (beginning with 1949, 145-81). The toponymic glyphs of Tututepec, Jaltepec, Suchixtlán, Zahuatlán, and Apoala, among others, were skillfully explained by Smith (1983). Wigberto Jiménez Moreno contributed a reading that locates the glyph of Achiutla in Codex Selden (Gaxiola and Jansen 1978), and the place signs of Tlaxiaco, Chalcatongo, and Zaachila were discovered by Jansen (1980). Nonetheless, some identifications have been more difficult to verify. These include Byland and Pohl's (1994, 66-72) placement of the site known as Bulto de Xipe or Huachino and the no less controversial hypothesis of Jansen (1998, 98-115) regarding the presence of Monte Albán in the Mixtec codices. Among the completely unsuccessful efforts is Robert Chadwick's (1970, 216-28) assertion that the glyph of Xochicalco appears in Codex Bodley—an interpretation that was never supported by other researchers.

Although significant progress has been made in the decoding of some Mixtec toponyms, others remain unidentified. There are many reasons for this situation, including the obvious movements of settlements from their pre-Hispanic locations during the early Colonial

period following reorganizations effected by the Spanish administration. The original designations changed due to the fact that people stopped using their Mixtec names and adopted Nahuatl or Spanish replacements. Many towns disappeared on account of epidemics that broke out in New Spain after the first half of the sixteenth century. It is possible that some of the places named by glyphs in the Mixtec codices were abandoned by the Late Postclassic and constitute what we now call archaeological sites. For the Mixtec people at that time, these would have been sacred settlements.

Until now, the meanings of ancient archaeological places have hardly been explored according to the world views of the Mesoamerican group that existed just prior to the conquest. We know that in Central Mexico, the Mexica recovered archaeological objects at such sites as Teotihuacán and Tula and used these as highly symbolic offerings in the Templo Mayor at Tenochtitlán.² However, we do not know much about how the people of the Mixteca regarded their ancestors, nor do we understand how their origin myths were blended around the ancient peoples who had occupied the deserted settlements. This invites exploration of some of the origin myths preserved in the region as they are recorded in pre-Hispanic pictorial forms, which brings better understanding of the role the archaeological sites probably played in the foundations of the towns.

THE TRADITION OF THE LORDS OF APOALA

Mixtec codices include detailed accounts of both the origins of communities and the births of their rulers. These histories commonly begin with a sacred narration about the genesis of the lords in which the gods play a key role through a supernatural act that gives rise to a ruler. Once the ruler appears in the world, he begins to perform rituals that will lead him to found a people and start a new dynasty.

Important narratives about the beginnings of the lords occur in *Codices Vindobonensis*, *Nuttall*, *Bodley*, and *Selden*. These documents have different representations of men who are born from diverse natural elements: water, soil, rocks, hills, and trees. Several of these births involve important people who were the primogenitors of such prestigious places as Tilantongo, Jaltepec, Suchixtlán, and Apoala. Today, the story of the first lords who were born from a large tree in the Mixtec community of Apoala is

well known. The account emphasizes the role of these lords in seizing the entire Mixteca region and establishing many dynasties. The narrative "The Lords of Apoala" comes from a text published in 1593, in Arte en lengua mixteca, by the Dominican friar Antonio de los Reyes, who was a vicar of Teposcolula. In the preface of his work, De los Reyes ([1593] 1976, 1-2) transcribes an important story concerning the mythic origin of the Mixtec lords, but unfortunately he does not mention when or where he acquired the information. It is very likely to have come from the local tradition of Teposcolula. Broadly speaking, we can say that the myth relates how Mixtec lords detached themselves from the trunks of some trees that were in the river of Apoala and then managed to gain power over the Mixteca. They controlled all four directions of the entire territory after conquering the original inhabitants, who appeared in the center of the land.3

In the mid-seventeenth century, Francisco de Burgoa transcribed De los Reyes's work with slight modifications. However, it is also possible that Burgoa ([1674] 1997, 1:128r) took the myth from other historical sources or perhaps from narrations recorded by other members of the order. All that is known for certain is that "The Lords of Apoala" was compiled in a late period and that the specific sources on which De los Reyes relied to write his prologue are unknown. We know that the narration comes from a pre-Hispanic tradition, but as is evident from the codices, other myths are not precisely consistent with the relation published in 1593. Thus, we have a retelling with elements from earlier traditions that appear in the codices but that do not come directly from a specific, known prototype.

"The Lords of Apoala" and Codices Nuttall, Vindobonensis, and Bodley emphasize Tilantongo as the most important kingdom of the Mixteca. All of these sources communicate the theme of attempting to legitimize the power and prestige that Tilantongo had at the time of the Spanish arrival. The privilege of this place in comparison with other communities is corroborated in numerous sources. Several documents indicate that the dominance of Tilantongo was pervasive throughout the Mixteca and that this dominance had existed almost from its founding date. Interestingly, if we carefully study the pre-Hispanic pictographic sources, we notice that Tilantongo's political status came from a complex web of marriage alliances involving sacred places that did not necessarily form a fully established domain, as is the case for the toponym Mountain That Opens-Bee (Monte que se Abre-Abeja).

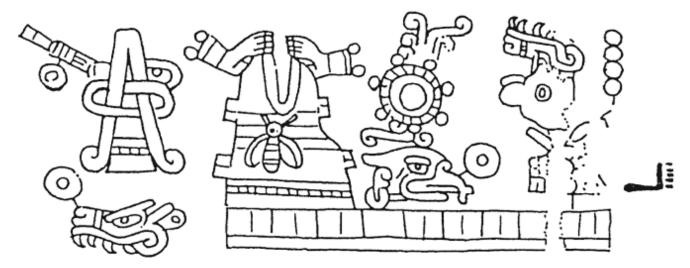


Figure 7.1. The toponymic glyph of Hill of the Bee or Mountain That Opens–Bee and the calendrical names of Lady 1 Vulture and Lord 4 Rabbit, *Codex Bodley*, page 4-II. Drawing by Dinorah Lejarazu Rubín.

THE GLYPH OF MOUNTAIN THAT OPENS-BEE

Early Mixteca history mentions a number of places whose correlations with modern geographic areas have been problematic thus far. Although we have no clear indications of these locations, they are tremendously important because they gave rise to the sacred dynasty of Tilantongo that was so widely represented in the Mixtec codices. The main couple that eventually created the Tilantongo dynasty is represented on page 21 of Codex Nuttall. They are 4 Crocodile Bloody Eagle and Lady 1 Death Fan Sun, both of whom lived in a place called Hill of the Sun.⁴ The man, 4 Crocodile, is mentioned in the Relación geográfica de Tilantongo (Acuña 1984, 2:223-48) as the lineage founder, while Lady 1 Death appears on page 1 of Codex Bodley in a depiction of her birth. She emerges from a thorny tree whose location is difficult to determine due to damage to the drawing. The date of their marriage has been placed in about the year AD 940. However, the location of Hill of the Sun has not been established with certainty, although some specialists such as Byland and Pohl (1994, 198) identify it as Yucu Gandii, a mountain near Achiutla. In a recent article, Byland (2008, 347) has maintained the association of Hill of the Sun with Achiutla.

This first couple, 4 Crocodile and 1 Death, is important since these are the parents of the woman who will legitimize Tilantongo's first ruler. The daughter is 1 Vulture Cloud Jewel, who for unknown reasons does not appear in *Codex Nuttall* but does in *Codices Bodley* and

Vindobonensis reverse. According to the latter codex, Lady 1 Vulture (known there as 1 Eagle) came from a place named Hill of the Sun to marry a Lord named 4 Rabbit Jaguar-Crocodile. Although, as we have just noted, Codex Nuttall does not mention Lady 1 Vulture, at least the presentations in Codex Vindobonensis reverse and in Codex Nuttall are consistent in referring to the Hill of the Sun as the home of her parents, 4 Crocodile and 1 Death. Lady 1 Vulture and her husband, 4 Rabbit, became rulers of the place called Hill of the Bee or Mountain That Opens-Bee in the codices (fig. 7.1). The question of the significance of this place has given rise to many different speculations, including that it was the first metropolis of the Mixteca (Caso 1977, 55) and also that it was the capital of the Classic period Zapotec ceremonial center, Monte Albán (Jansen 1998, 98-115).

In order to discuss the actual location of the painted toponym, it is first necessary to review some of its compositional elements. According to *Codices Bodley* and *Vindobonensis* (fig. 7.2), the motif that represents the residence of 4 Rabbit and 1 Vulture is a hill with a slit at the top or in one of its sides and two hands that seem to open its summit (fig. 7.2a). In the *Vindobonensis* image (fig. 7.2b), a complete male figure was included. Although this scene expresses the same concept as the *Codex Bodley* example, the man executes the act of "opening" and "breaking" the hill's summit. The depictions of insects are also similar but are not exact duplications. In the *Codex Bodley*, in the center of the glyph, the creature is small and has wings and feelers. The *Codex*

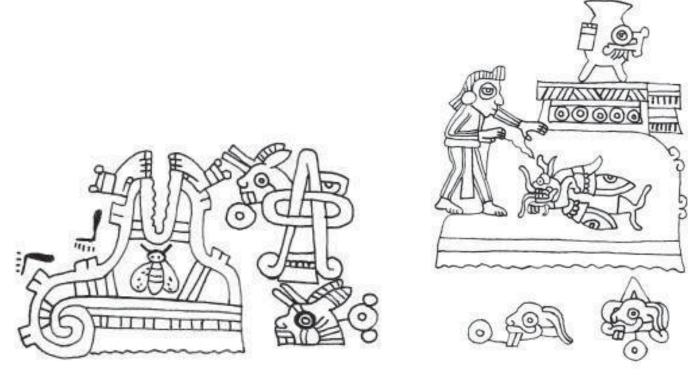


Figure 7.2. Toponymic glyphs of the Hill of the Bee or Mountain That Opens–Bee: (a) (left) Codex Bodley, page 3-II; (b) (right) Codex Vindobonensis, page 42. Drawing by Dinorah Lejarazu Rubín.

Vindobonensis toponym shows it as more detailed and includes an extended body with two big blue wings and a long leg with talons, an elongated section that apparently ends in tails, and a head that is a small skull with feelers and volutes that protrude from the jaw. Almost the same picture is shown on page 1 of Codex Vindobonensis, although the insect is a little larger and its chest is bulkier.

Page 19 of *Codex Nuttall* includes a similar image (fig. 7.3, lower right) in which the insect's head is different from those mentioned previously but also has two prominent volutes that emerge from its mouth. The wings, which are somewhat shorter, remind us of the trilobed shape of the Venus star in Mixtec codices. Moreover, at the end of its body is a kind of tail that is similar to the one of the insect on page 42 of *Codex Vindobonensis* (see fig. 7.2b). Due to these diverse characteristics, it has been difficult to identify the arthropod accurately.

Certainly, many of the differences in form are due to the varying approaches of each painter. Despite the fact that the painter of *Codex Bodley* worked during a later artistic period than that of *Nuttall* or *Vindobonensis*, he included the basic characteristics (feelers and wings)

that show the creature is an insect. However, his design is so schematized that it has been very difficult to identify the species or variety. This in turn has clearly made it difficult to correlate that element of the toponym with any particular place in the Mixtec geography. Caso (1960, 28) first interpreted the insect simply as a bee and remarked that the complete glyph represents an important and powerful metropolis in the northern Mixteca. From the context of this toponym in the early history of the codices, Byland and Pohl (1994, 94-98) currently relate it to an archaeological site near Tilantongo that is called Yucu Yoco by its present inhabitants. Yucu Yoco is located in the municipal agency of San Isidro, which according to these specialists—has a small platform with a ramp that could have played a civic and ceremonial function during the Classic period.

It is my opinion that Byland and Pohl have not fully analyzed the codex image. They have only related the current name of Yucu Yoco, "Hill of the Wasp," to the Mountain That Opens–Bee toponym in the codices. Byland and Pohl provide a very valuable archaeological survey of the Tilantongo area, but further iconographic analysis is needed. Looking again at this toponym, we know that *yucu* means "hill," but although the word

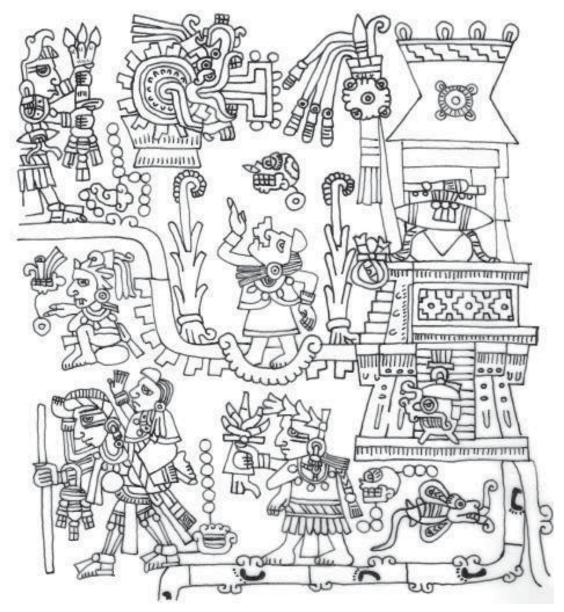


Figure 7.3. A temple with a Rain God pot, Lady 1 Death, and a winged insect. The standing female figure, flanked by two corn plants, is in an enclosure or courtyard; the insect is located below the temple, *Codex Nuttall*, page 19. Drawing by Dinorah Lejarazu Rubín.

yoco means "wasp," this does not guarantee that the term applies to the insect pictured in the Mountain That Opens–Bee glyph (even though the term yoco refers to a honeycomb wasp, according to information given to me by Narciso Pablo León and Eliseo Reyes, both inhabitants of Tilantongo). Moreover, I would say that Byland and Pohl do not give enough historical evidence to support the identification of this site as the one that is illustrated. While Yucu Yoco does have archaeological

remains, not enough facts establish with certainty that these pertain to Mountain That Opens–Bee.

Although the study of the insects illustrated in the codices surely requires future collaboration with an entomologist, I would now say that the traits of the wasp may be recognized more easily than those of another insect. First, wasps (*Vespula vulgaris*), like others of the same order, are distinguished by an organ called the ovipositor. Located at the rear of the insect's body, it can

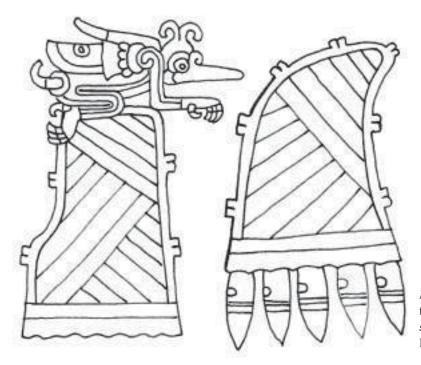


Figure 7.4. A wasp depicted on the glyph for Rock of the Wasp, Codex Vindobonensis, page 8. Drawing by Dinorah Lejarazu Rubín.

be transformed into a stinger by a group of glands that produce venom (Hook 2008, 147). As we have seen, the insect painted inside the glyph of the Mountain That Opens–Bee does not have a stinger. In fact, a different shape is used for the stinger of the wasp, as can also be seen in *Codex Vindobonensis* (fig. 7.4). Additionally, wasps have powerful jaws that appear to be sharp, consistent with the point on the front of the face in the previous example. Therefore, the arthropod in the Mountain That Opens–Bee is not a wasp, which is represented differently.

Jansen has related the glyph of the Mountain That Opens-Bee to a group of hills near the current archaeological site of Monte Albán (Jansen and Pérez Jiménez 2007, 120). His main argument is based on a comparative analysis of a colonial document called the Map of Xoxocotlán, which shows a group of hills and peaks corresponding to the location of the archaeological site to the east of the community. Jansen relies on two place names in identifying the glyphs under discussion. The first is a hill called Acatepec or Yucu Yoo, "Hill of Reeds," and the other is Sayultepec, "Hill of the Fly" (Jansen 1998, 74-75). He links these places with two forms on page 19 of Codex Nuttall, an enclosure or courtyard flanked by two reeds or corn plants (a connection that I consider to be ambiguous) and the insect located below a platform and a temple (see fig. 7.3).

Without detailed iconographic analysis, Jansen concludes that the *Codex Nuttall* corn plant (*huiyo* in Mixtec) should be read as a reed (yoo in Mixtec) and should be interpreted as the name of one of the peaks of Monte Albán. From my point of view, the corn plant (huiyo) is not comparable to a reed, since *Codex Nuttall* (see fig. 7.3, flanking center figure) shows a clear drawing of the tassel that can easily be seen in a cornfield, at the top of the plant. Elsewhere, Jansen identifies the insect as tiyuqh, "fly" or "louse," from which he makes a connection to the toponym of Sayultepec, which is included in the Map of Xoxocotlán. Jansen identifies the huge hill on page 19 of the Codex Nuttall as Yucu Cahnu, "Big Hill" or "Big Rock," a designation for Monte Albán that corresponds, according to him, to Cáhnu, "Mountain That Opens/ Breaks." He reasons that with tonal changes, this Mixtec word means "big," cahnu, and also "breaking," cáhnu (Jansen 1998, 109-12).5

Notwithstanding the several hypotheses that Jansen has developed to explain the presence of Monte Albán in Mixtec codices, my view is that there are other noteworthy historical and iconographic elements, which have led me to interpret the assembly of glyphs previously analyzed here quite differently. Several documentary sources lead me to propose an alternative identification, and an iconographic analysis of the insect, along with other elements of *Codex Nuttall*, also suggests a different direction.

THE GLYPH OF THE HILL OF THE CICADA

In the *Relación geográfica de Tilantongo*, written in 1579 by Corregidor Juan de Bazán and Vicar-Friar Pedro de las Eras, is a very interesting fact pertaining to the name of a group of hills that border the town toward the south. The *Relación* says, "There is then, next to [it], another very large mountain near this town [Tilantongo] to the south, which is called in Mixtec *yucudii*, and in Náhuatl *chiquilitepeque* and, in Castilian, 'sierra de chicharra.' And the others are painted in the painting that was done, which will become clearer." According to a note on the same *Relación geográfica* that was commented on by René Acuña (1984, 2:235n31), the gloss *chiquilichiquilitepeque* (*sic*) is legible in the original manuscript. Nevertheless, Acuña does not discuss either its Mixtec or Nahuatl meaning.

Chiquilitepeque or Chiquilichtepec indeed means "Hill of the Cicada" (chicharra). In his Vocabulary in Nahuatl, Friar Alonso de Molina ([1571] 2001, 21r) clearly records the word chiquilichtli for the word cicada, so the toponym is composed of the root chiquilich- (without the absolutive *-tl*), the word *-tepe-* (hill), and the locative *-c* (place). Thus, the name registered in the document as "chiquilichiquilitepeque" was slightly modified from its original voice: Chiquilichtepeque. Nevertheless, the text does obviously refer to the cicada, that is, the name of the particular insect that produces a loud buzzing noise using membranes that contain air sacs and serve as resonance chambers. These are located on the sides of its abdomen. The cicada's song (Cicada orni) is produced by males to attract females, and since the breeding period coincides with the dry season, Mixtec people think the cicada makes this buzzing noise to ask for rain. Or, perhaps, it announces a drought.⁷ As regards the toponym in Mixtec, fray Francisco de Alvarado ([1593], 1962, 63r-64r) states that the word for cicada is tidzi, and he also records the same definition for the term chicharra. Thus the Relación geográfica is correct in using that name to refer to the insect.

Studies on the phonology of the Mixtec region have shown that in the area of Teposcolula, the place from which the vocabulary of Alvarado originates, the phoneme dz seems to represent a sound like a d (an interdental fricative sound), also the sound of a theta (θ ; Terraciano 2001, 76). In the area of Yanhuitlán, dz was written simply as d due to regional variations that have been documented since the mid-sixteenth century. Now the word plain is pronounced in Tilantongo as yodo,

while in the dictionary of Alvarado, *valley* or *plain* appears as *yodzo*. Because of these differences in dialects, the *Relación geográfica de Tilantongo* recorded the toponym Hill of the Cicada as Yucu Dii, which corresponds to Yucu Dzi in the Mixtec of Teposcolula. Hence, it is the same term for chicharra, except that the *Relación geográfica de Tilantongo* reflects the written form of its own variant. In some dialects, in fact, the prefix *ti*-, a semantic marker to designate animate beings, is deleted when it forms toponyms (Hermann Lejarazu 1994). In that case we find the name Yucu Dii instead of Yucu Tidii.

My own investigations do not support Jansen's idea that a fly or a louse shares the same term in Mixtec, tiyuqh. As noted, this idea serves as an argument for his identification of the glyph for Mountain That Opens-Bee as Sayultepec, "Hill of the Fly," which is represented on the Map of Xoxocotlán (Jansen 1998, 75). Furthermore, Jansen (1998, 109) concludes that the drawing of the insect varies considerably, making it difficult to identify clearly, so he suggests that one example is a fly and the other is a louse. During my fieldwork in some communities of the Mixteca Alta, I recorded the different names that distinguish a fly from a flea or a louse. In Tlachitongo, near Yanhuitlán, I found that the word for fly is tiugnu, which corresponds to tiyuqh or tiyug in the Teposcolula variant (Alvarado [1593] 1962, 152v). In Tlachitongo flea is tihyiu, which appears in Alvarado's ([1593] 1962, 175r) dictionary as tiyoho. The latter source registers louse as teyucu (Alvarado [1593] 1962, 168r), and we found it as tiyoco in Tlachitongo. Thus, variations in the words used to identify different insects exist in both the modern Mixtec as well as in the archaic form of the language recorded by Alvarado in the sixteenth century. The Nahuatl gloss Sayultepec on the Map of Xoxocotlán means "Hill of the Fly." Even though the drawing of the insect is difficult to identify, the Mixtec text clearly states that the toponym motif is a fly.

I would argue that the features of the cicada that I have presented here closely link the arthropod with the iconography of the glyph for Mountain That Opens–Bee in the *Codex Vindobonensis*. In fact, the animal drawn on page 42 (see fig. 7.2b) has a pair of volutes coming out of its jaw, which may represent the very special buzzing noise of this insect. The volutes emerging from the insect's mouth on page 19 of *Codex Nuttall* (see fig. 7.3) are shown so much more clearly that they are likely to represent one of its primary distinguishing features, its ability to "sing" or make a squeaking sound. This follows the more general use of volutes to symbolize words, songs, or even sounds.



Figure 7.5. A cicada. Photograph by Manuel A. Hermann Lejarazu, 2014.

More elements can be related to the iconography of the cicada. Unlike wasps, female cicadas have a long ovipositor that is sharp enough to puncture the surfaces where they lay their eggs. 8 This feature is probably shown in the previously discussed insects in the Nuttall and Vindobonensis codices, where a tail-like form that is painted in yellow or red extends from the rear end or abdomen. Moreover, we note that the front leg that bends forward in the example on page 42 of Codex Vindobonensis closely resembles the actual extremities of the cicada (see fig. 7.2b, fig. 7.5). Therefore, several of the morphological characteristics of this insect are represented in the codices through iconographic elements that were particularly emphasized by the painters. But if this comparative analysis between the real insect and its representation in the codices helps identify it in nature, we must not forget that symbolic elements embodied in the animals do not necessarily agree with their physical characteristics.9 Therefore, we must consult historical sources to find further support for the proposal under consideration.

As I have mentioned, when the *Relación geográfica* refers to Chiquilitepec, it tells us that "a very big mountain range 'encloses' this town in the south" (Acuña 1984,

2:235). South of the center of the modern town of Tilantongo is a large mountain that is now known as Monte Negro (Black Mountain), on which is built an archaeological site that corresponds to one of the oldest cities of Preclassic Oaxaca. Therefore, the toponym of Chiquilichtepec or Yucu Dii seems to refer to the old name of the archaeological site, or at least to a previous name of the hill of Monte Negro.

THE SITE OF MONTE NEGRO IN THE ARCHAEOLOGY OF OAXACA

We have no records indicating when people began to refer to Monte Negro (Yucu Tnoo, the place I identified as Yucu Dii). It has been registered this way since the first explorations there by Caso (2003, 76) in 1936. Nevertheless, we note that in Manuel Martínez Gracida's (1891–1894) work, the name of Yucu Tnoo, "Black Mountain," actually applies to the hill where the current community is established, as will be discussed further.¹⁰

The archaeological importance of Monte Negro lies in the fact that the site is one of the oldest cities in Oaxaca. It was continuously occupied during the Late Preclassic period, between 650 and 400 BC, which corresponds to the Monte Albán I period (Acosta and Romero 1992, 157). Although recent studies of pottery and architecture reveal, according to Spores (2007, 26), its occupation until the Early Classic (between 400 BC and AD 300), Yucuita, Diquiyuu, and Monte Albán II are regarded as contemporary sites.¹¹

Despite the abandonment of Monte Negro at a very early date, several interesting discoveries probably show subsequent occupation or at least significant reuse for ritual purposes. Caso (2002, 164) found a Teotihuacán-style mask carved in tecali stone at an important mound. He remarked that it was not possible to determine the precise date when the object was used because it was found on the surface, but he presumed that it must have formed part of an offering that was much more recent than the primary occupational phase. Additionally, recent explorations by Stephen Kowalewski and his team (2009, 72) reveal a minor occupation at Monte Negro during the Postclassic period, which consisted of an isolated residence and evidence of ritual activities in one or two early structures.

All this information leads us to consider the possibility that Monte Negro is represented in the Postclassic Mixtec codices—Nuttall, Bodley, and Vindobonensis—as a place associated with the early history of the Postclassic lords. Some specialists think the transition from the Classic to the Postclassic is treated in the Mixtec codices as a time of change and transformation that was reflected in political alliances and military conflict. They see this treatment as having real and metaphorical aspects in an episode known in the literature on the Mixtec codices as the "War of Heaven." Byland (2008, 346-50) suggests that Mountain That Opens-Bee or Hill of the Wasp developed a long military alliance with Achiutla that represented according to him—the prolonged stability of the centers and a broad political control during the Classic period. When the "War of Heaven" occurred, Mountain That Opens-Bee or Hill of the Wasp was no longer the main center of the Mixteca Alta.

Jansen describes the transition from Classic to Postclassic as a religious crisis at Monte Albán, when a group of followers of Quetzalcoatl founded a spiritual community after a priest named 12 Wind Smoky Eye and the Mixtec Lady 3 Flint Quechquémitl of Jade married (Jansen and Pérez Jiménez 2007, 121–26). According to Jansen's interpretation, the marriage was held in a temple on the Northern Platform of the ancient Zapotec capital.

He goes on to say that, as a consequence of this union between Monte Albán and the community of the valley of the Lords of Apoala, a Mixtec "province" was created under the direct influence of Monte Albán. This led to the foundation of Tilantongo by the same priest, 12 Wind.

As I stated earlier in this study, I do not accept Jansen's proposal that Mountain That Opens–Bee is Monte Albán, nor do I follow Byland and Pohl's suggestion that the glyph corresponds to the site of Yucu Yoco, or Hill of the Wasp. My understanding of the origin of the Mixtec kingdoms differs markedly from these views.

MONTE NEGRO AS A PLACE OF ORIGIN

My idea concerning the place of origin of the Mixtec kingdoms relies on the analysis presented in this chapter that identifies Mountain That Opens-Bee as Yucu Dii, or Hill of the Cicada. In a previous study, I noted that Tilantongo acquired its political legitimacy under abnormal conditions and that it had indirectly received the symbols of power that had originally been intended for other lordships (Hermann Lejarazu 2005, 52-54).12 The role of Hill of the Cicada/Monte Negro in the origin of the dynasty of Tilantongo is clear in Codex Nuttall, which relates a different historical account from that recorded in Bodley or Vindobonensis. It may be an older tradition than the one depicted in Bodley because Codex Nuttall indicates how the ancient political and religious center of Hill of the Cicada/Monte Negro was attacked. First came the assault by stone men (a group of beings shown with vertical colored stripes). Later, colored-striped men attacked the White Hill of Flints, which led to the transfer of such primary objects of worship as the sacred bundle of 9 Wind Quetzalcoatl to another place, the Temple of Heaven in Tilantongo.¹³ Thus, the two conflicts represented in Codex Nuttall affected the creation of the first lordships in the Mixteca, since after the destruction of Hill of the Cicada/Monte Negro, a new power center was founded.

According to page 22 of *Codex Nuttall*, the foundation of the political and religious center of Tilantongo came after the cult of the sacred bundle of 9 Wind was established by Lord 12 Wind Smoky Eye, the husband of 3 Flint. The sacred place where people of Tilantongo would settle was, according to *Nuttall*, founded by Lord 7 Death and Lady 1 Serpent. She was, perhaps, the daughter of 12 Wind and 3 Flint, the lords who came from Hill of the Cicada/Monte Negro (Hermann Lejarazu 2008a,

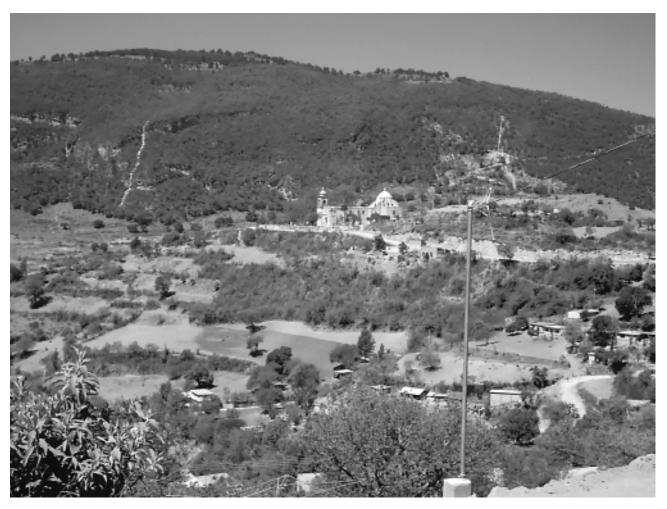


Figure 7.6. The Church of Santiago Apostol in Tilantongo and Monte Negro behind it. Photograph by Manuel A. Hermann Lejarazu, 2008.

58). The first rulers of the Tilantongo dynasty were Lord 9 Wind Stone Skull and Lady 5 Reed Rain Quechquémitl, the daughter of Lord 4 Rabbit Jaguar Crocodile and 1 Vulture Cloud Jewel. The latter couple is depicted as ruling the Cerro de la Cigarra/Monte Negro in *Codex Bodley* and on *Vindobonensis* reverse.

The pictorial sources clearly contradict each other, since *Codex Nuttall* says that 12 Wind and 3 Flint were at the Hill of the Cicada/Monte Negro, while *Codex Bodley* says that 4 Rabbit and 1 Vulture were the lords of this place. As might be expected, the narration in both codices is inconsistent, which makes it impossible to weave everything into a single explanation. It must be recognized that these Mixtec codices contain two different historiographic traditions and that reconciling the accounts will not be possible. The two codices were made at different times, with very different objectives, and they record different moments in the history of

Tilantongo. They are simply not in agreement concerning certain periods.

In the first version, on pages 19–22 of *Codex Nuttall*, the reference to the origin of Tilantongo points to the marriage of Lords 12 Wind and 3 Flint. They were influenced by two mythic wars, which forced them to move and to found another place for the most important religious worship of the Postclassic Mixteca: the sacred bundle (Hermann Lejarazu 2008b, 80–82). The sacred bundle of 9 Wind Quetzalcoatl was finally placed in the Temple of Heaven at Tilantongo. As a consequence, Tilantongo appears in *Codex Nuttall* as a place that indirectly received political and religious power that had belonged to other sites that were unable to thrive.

Moreover, from my point of view, pages 1–4 of *Codex Bodley* and pages I–II of *Vindobonensis* reverse portray a more recent tradition that prevailed at the time of the conquistadors' arrival in the Mixteca. Tilantongo no longer

appears as the lordship that received power in an abnormal way, but as the legitimate heir of the Hill of the Cicada/ Monte Negro. Thus, according to *Bodley*, Tilantongo's role is essential in the early history of the Mixteca, during the time when its first ruler married the last female heir of Monte Negro. Similarly, in the colonial narrative compiled by Burgoa, "The Archer of the Sun," an important warrior overcomes the sun with his arrows and takes over the kingdom of Tilantongo (see following). For the postconquest Mixtec people it was important to legitimize the value of their own past.

The interesting thing about both codices is the fundamental role of Hill of the Cicada/Monte Negro as place of origin of the first dynasties of the Mixteca. Based on this, we can reflect on the deep symbolic value that the former site of Monte Negro seems to have had for the Postclassic Mixtecs of Tilantongo, who were located a few miles away. The mythical foundation of Postclassic Tilantongo traces its antecedents to the ancient archaeological site of Monte Negro as part of its sacred legitimization. Now, the remains of the Postclassic temple are found as a mound behind the present church of Santiago Apostol (fig. 7.6), as Caso (2003, 77–85) proved in his early explorations.

We have previously mentioned the great mythical and sacred value that such cities as Teotihuacán and Tula had in the Aztec construction of their own legitimacy and ideology. Perhaps for that reason we should not be surprised that the Mixtecs of Tilantongo similarly found their own sacred ancestry among the rulers who lived in Hill of the Cicada/Monte Negro some centuries previously. It was normal that the site built in the Preclassic or early Classic would be subject to constant reoccupations and gifts by the descendants of those earlier men.

The sacred character of the archaeological sites in the historical traditions of the Mesoamerican peoples is clear. This divine aspect of the original sites, the places of origin of their rulers, was transcendent in the imagery of Mixtec kingdoms of the Postclassic. It is interesting that the connection between Tilantongo and the archaeological site of Monte Negro existed not only in terms of ideology or religion, but also in terms of physical space. This connection is shown by a late reoccupation and the reuse of certain ritual spaces in the Postclassic period, thus forming a bridge from the Postclassic occupation of Hill of the Cicada/Monte Negro to the Tilantongo settlement, which was depicted in detail in the codices. However, this connection can only be verified through extensive archaeological excavation.

MONTE NEGRO IN THE HISTORICAL ACCOUNTS

The historical sources on the Mixteca region make no reference to a possible Mixtec origin in Monte Albán. Rather, some Colonial period and nineteenth-century traditions place the origin of Tilantongo in Monte Negro, as fray Francisco de Burgoa mentioned. From careful reading of the Burgoa account, we understand that people from Tilantongo knew about the ancient ruins on the hill and saw them as the predecessor of the people from the Postclassic/Colonial period. This interpretation can be inferred from the narration of Burgoa concerning the archer of the sun:

On a singularly gloomy mountain, through the denseness of trees and terrible crags that cast it into mourning, leaving it as a tragic tomb or grave . . . and gentle Sagittarius, assuming that the Sun, wounded by his arrows, collapsed, conquered, in deadly paroxysms, leaving the land to him, and from this ridiculous fable, he made a basis for his manor and magnificent kingdom to be the most esteemed and venerated among the Kings of the Mixteca. (Burgoa [1674] 1997, 1:175v)¹⁵

Then, speaking about the cacique don Felipe de Austria, Burgoa says,

And on account of the inaccessibility of the site, which has been said [is] where he had his court, being assured of not having more wars with other nations, they went down, to the site which now has the town on a prominence in the range of low hills that projects over the depth of the valley about two long leagues from the old place. (Burgoa [1674] 1997, 1:177r)¹⁶

Despite the fact that the period of time does not match, this statement does preserve the memory of a descent from Hill of the Cicada/Monte Negro to the present town. Even the distance from the archaeological site to the current settlement corresponds to that stated by Burgoa.

We find another reference to the archaeological site where the "palaces of the king of Tilantongo" were located in the questionnaires that Antonio Bergoza y Jordán, bishop of Antequera, sent to all the priests of his diocese in 1803:

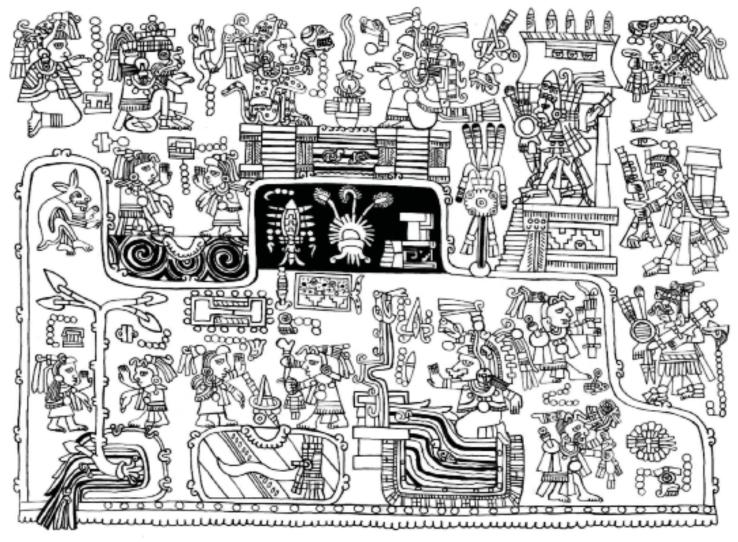


Figure 7.7. Yucu Tnoo, or Black Hill, Codex Nuttall, page 22. Drawing by Dinorah Lejarazu Rubín.

As antiquity accustomed [them] to form them on the tops of the mountains and hills with the heights of the walls serving effectively so they could defend themselves with stones and arrows from their enemies, during their skirmishes. This is proved by the town of Tilantongo that was the court of the Mixtec king who having as his own the so beautiful and pleasant valley of Yanhuitlán and Nochixtlán, he did not have it in it [the valley], and thus on top of the mountain of Tilantongo which is in the middle of other higher [ones]. The entrance of his palace was but a steep incline, where there are stones carved with such delicacy as if they had been worked by the most skilled European architect. (Huesca, Esparza, and Castañeda 1984, 1:141)¹⁷

These data about Tilantongo, written by the priest Matias José Feria from Nochixtlán, are certainly a clear description of some foundations at the archaeological site of Monte Negro, hence proving the endurance of the Mixtec tradition regarding the occupation of the ancient remains.

The name Monte Negro has now come to refer to the hill where the archaeological remains are located. I think it is possible to show that in fact the toponym Black Hill, or Yucu Tnoo, refers to the hill where the church stands today, where the remains of the buildings that correspond to the Postclassic period at Tilantongo can still be found (see fig. 7.6). In plate 22 of *Codex Nuttall* (fig. 7.7), we indeed see a black top in the middle of the hill, right next to the important ceremonial center of Tilantongo. The three motifs placed inside the black top could

indicate other names pertaining to the sacred hill, where the *aniñe*, or palaces, of the lords of Tilantongo and the missing Temple of Heaven were located.

Also on page 22 of *Codex Nuttall* are two geographic features that even today can be seen on the hill where the present church of Santiago was founded. One is a river or stream flowing from inside a temple dedicated to the plumed serpent (lower right). This spring or well is presently known by the inhabitants of Tilantongo as Ndecoo, which may be a contraction of the form Ndute Coo, "Water of the Snake"; it continues to have an important ritual aspect in some of the community's festivities. The second significant element is at the top left of the big hill, where we see the image of a rabbit. A topographic feature on the south side of the hill is still known as the Rabbit, which proves that Black Hill was indeed the original name of the main center of Tilantongo.

What I have interpreted on the basis of the iconography and the geographical reality, I have also documented in the unpublished writings of Manuel Martínez Gracida. In a text composed by Fidel López and sent to Martínez Gracida in 1892, we read the following:

To the southwest at a distance of seven leagues from the Villa de Nochixtlán, the district capital, and at the foot of a thick mountain is Tilantongo on a hill of medium height, covered with oaks and shrubs, being among these many homes of the locals. There are also the great ruins of the old buildings that once served as home to the kings of the Mixtec empire. The hill is 464 meters high and is called Yucutnoo in Mixtec, which means Monte Negro. Its top is circular, and is 108 meters long and 99 wide, surrounded by stone walls in its entirety. There is in the center of the top of the hill a formidable artificial hill made of adobe, and layers of bands of smoothed white earth, the rest of the top served as the site of rooms, divided into parts made of brown carved stones. . . .

On the hill mentioned above where the first Catholic temple was, the current residents of Tilantongo are building another new one, [and] they have advanced half of the temple construction . . .

Tilantongo, October 15th, 1892.

Fidel López (Martínez Gracida 1891–1894, 54:fols. 70–74)¹⁸

This extraordinary information proves that Yucu Tnoo was the name of the hill where the population is now established and where the church was built. Moreover, it is also the place where the remains of the ancient settlement of the Postclassic period are located, which corroborates this interpretation of plate 22 of *Codex Nuttall* (see fig. 7.7).

MONTE NEGRO AND GEOGRAPHIC REALITY

What about the geography of the Hill of the Cicada? In plate 42 of Codex Vindobonensis we see a long list of place-name glyphs whose order of reading corresponds to an actual geographic arrangement (fig. 7.8). At the top right of the plate is a hill with a picture of a temple located in the center. Then, to the left, is a tip or blue cone on top of a small hill, which is next to a double top that holds a strip from the sky. Due to the elements of these names-temple and hill of blue cone-we know that it is a set of directly related places that frequently appears in other codices, as on pages 37 and 38 of Codex Nuttall. Another interesting passage in the same Relación geográfica de Tilantongo mentions the name of a mountain range that borders Tilantongo toward the west. This is called Yuco Yucu in Mixtec or Teopantepeque, "In the Temple of the Hill." This toponym could correspond to the glyphs that we have just seen represented on page 42 of Codex Vindobonensis, which are also found on page 2 of the same manuscript (Acuña 1984, 2:235). The list of sites (fig. 7.8) continues with the representation of the toponym of Tilantongo, identifiable by a black pyramidal base and fret panel also painted in black. Furthermore, we find the figure of a plumed serpent and a plant or herb that reminds us of the same glyphs on page 22 of Codex Nuttall. So there is no doubt that it is the glyph of Tilantongo.

In the *Codex Vindobonensis* list of places (fig. 7.8, at the bottom of the second row from the left), Hill of the Cicada follows Tilantongo in the sequence of nearby settlements. This is another argument that reinforces our interpretation that the latter might be what is now known as Monte Negro, the place where the Preclassic or early Classic archaeological site is located. We also see a drawing of a pyramidal base that supports a pot in the shape of the rain god, which may indicate that a temple for the deposition of gifts to bring rain is located on Hill of the Cicada.

Hill of the Cicada is closely related to a courtyard or an enclosed precinct that is adorned with merlons and

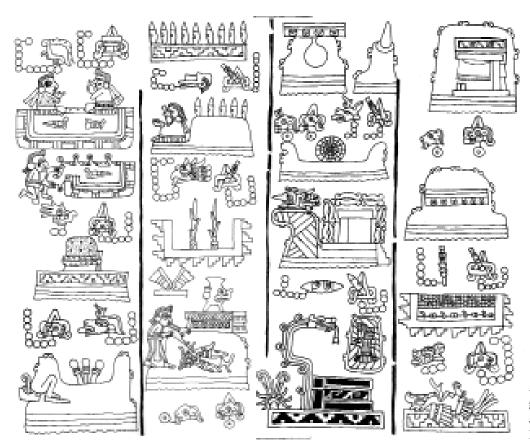


Figure 7.8. A list of place-name glyphs in the Codex Vindobonensis, page 42. Drawing by Dinorah Lejarazu Rubín.

has two corn plants at the center (shown directly above). This same combination of elements—including the courtyard with merlons, the corn plant, the pot in the form of the rain god, and the cicada—is consistently repeated in the illustration of the great mountain on page 19 of Codex Nuttall, which this study identifies as Chiquilichtepec or Yucu Dii. The ground on which the structures of the archaeological site are erected is known today as Tnu Ndoo, "Lip of Pot," but this could also mean "Slope of Corn Stalks," or Itnu Ndoo. The image could refer to the place where Lady 1 Death is raising corn (see fig. 7.3). Hence, the large rock configuration that appears on the left side of plate 19 of Codex Nuttall may well represent the distinctive cliff (or rock formation) that defines northern Monte Negro and is now called Cahua Ñaaduhu.19

As we see, not only historical, iconographic, and philological elements have provided information to support this proposal of a new identification of the Mountain That Opens–Bee glyph, but also some geographic features favor the interpretation of this place as the ancient Hill of the Cicada. Nevertheless, I regard the association as tentative and in need of further investigation.

CONCLUSIONS

The suggestion presented here, that the place sign shown as Mountain That Opens–Bee is Hill of the Cicada/Monte Negro, is part of a wider investigation. I would emphasize that it is based entirely on relationships found through the reading of glyphs, the iconographic analysis, and the available historical and linguistic sources. And although further work on the early history of the Mixteca is needed, it is appropriate to disseminate these preliminary results.

The scholarly perspective concerning early pre-Hispanic Mixtec history is totally different if this identification of Hill of the Cicada is correct. The foundation of Tilantongo originates in the same place where the settlement existed several centuries previously and does not derive from the ancient city of Monte Albán. My analysis is based on a careful reading of the Mixtec language recorded in Alvarado's vocabulary and in the modern Mixtec dialect from the Tilantongo area, which has inspired me to propose a new interpretation that portends an important change in our understanding of the Mixtec pictorial histories. I think the connection between Tilantongo and the archaeological site of Hill of the Cicada/Monte Negro is interesting because it existed not only in terms of ideology or religion, but also in terms of physical space. This connection is indicated by the late occupation and reuse of certain ritual spaces during the Postclassic period, a practice that formed a bridge between the Postclassic occupation of Hill of the Cicada/Monte Negro and the settlement of Tilantongo shown in Mixtec codices. The analysis of place names along with the iconographic study gave me deeper understanding of the meaning of the glyphs. In addition, data collected in documents and historical files provided insights regarding the importance of Monte Negro in the ancient history of the Mixtec.

NOTES

- Mixtec speakers inhabit a vast territory of broad mountain ranges and small valleys that stretch across the modern-day states of Puebla, Guerrero, and Oaxaca. The Mixtec screenfold manuscripts consist of the Codices Zouche-Nuttall (1987) or Nuttall (in this chapter I use Nuttall), Vindobonensis (1974), Colombino (2011), Becker 1 (1961), Bodley (1960), and Selden (1964).
- I use the name Mexica to refer to the inhabitants of Mexico-Tenochtitlán; the god Huitzilopochtli asked them to adopt this name before they founded the city (Matos Moctezuma 2006, 13).
- 3. De los Reyes's ([1593] 1976, 1) original text says, "It was a common belief among the native Mixtecs that the origin and beginnings of their false gods and lords was in Apoala, a village of this Mixteca, that in their language they call yuta tnoho, that is 'River, Where the Lords Came Out' because they were said to have been detached from some trees that grew out of that river, which have specific names. They also call that village yuta tnuhu, which is its more correct name, and the one that fits best." In the original Spanish, "Vulgar opinión fue entre los naturales mixtecas, que el origen y principios de sus falsos dioses y señores, había sido en Apuala, pueblo de esta Mixteca, que en su lengua llaman yuta tnoho, que es Río, donde salieron los señores porque decían haber sido desgajados de unos árboles que salían de aquel Río, los cuales tenían particulares nombres, Llaman también a aquel pueblo, yuta tnuhu, que es Río de los linajes, y es el más propio nombre, y el que más le cuadra."
- 4. The names 4 Crocodile and 1 Death are calendrical and indicated by birth dates. The recycling divinatory calendar that was used by the Mixtecs combined twenty days and thirteen numerals; its first day was 1 Crocodile, the second was 2 Wind, the third 3 House, and so on.

- The meaning of *cáhnu*, for the word "romper" (break), is documented by Jansen in a quotation from Smith (1973, 57).
- 6. In the original Spanish, "Esta luego, junto, otra sierra muy grande que cerca este pueblo [Tilantongo] hacia el sur, la cual llaman en Mixteca yucudii y, en mexicano, chiquilitepeque y, en castellano, 'sierra de chicharra'. Y, las demás, van pintadas en la pintura que se hizo, donde se verá más claro" (Acuña 1984, 2:235). Unfortunately, the painting is lost.
- This information, given to me by a young man during my fieldwork in Tilantongo, was also documented by Cruz Ortiz (1998, 124–25).
- 8. For more information about wasps and cicadas, see www. terralia.com/index.php?revista=8&articulo=48.
- 9. There is indeed another element that complicates the identification. It is the skull that the insect has in Codex Vindobonensis but not in the Codex Nuttall. So far, I have found no data in the indigenous view of the world that allows us to explain why this animal would have a skull replacing its head. The only suggestion that I can offer is based on the fact that when the cicada larvae or nymphs leave their eggs, they fall to the ground and dig to enter it. In fact, cicada nymphs live underground, feeding from the roots of plants and trees, and can subsist within the earth for four to seventeen years, depending on the species. After a long period, the adult cicadas come out of the ground and are ready for mating (Hook 2008, 198-99). It is likely, then, that the cicada is represented by a skull because it symbolizes its long growth within the earth or the underworld during which it maintains a close relationship or contact with the world of the dead. However, this is only an idea.
- 10. See Martínez Gracida 1891–1894, 54:leaf 70–72, information given by Fidel López in letters and notes collected in the unpublished work of Martínez Gracida preserved in the Biblioteca Pública del Estado de Oaxaca. I appreciate this citation information, provided by Sebastian van Doesburg.
- This is the standard chronology for Oaxaca (Spores 2007, 12).
- 12. The first lords established themselves at Hill of the Cicada/ Monte Negro. Then they left their palace, and the symbols of power were carried to the new palace at Tilantongo.
- 13. For a more detailed analysis of the earlier history of Tilantongo, see Hermann Lejarazu 2008a.
- 14. I would like to thank my friend and colleague Sebastian van Doesburg for bringing this aspect to my attention.
- 15. In the original Spanish, "Sobre una montaña con singularidad lóbrega, por la espesura de árboles y funestos peñascos que la enlutan, dejándola como trágica tumba, o sepulcro... y el Sagitario gentil presumiendo que herido el Sol de sus saetas, en mortales parasismos desmayó vencido, dejándole por suya la tierra, y de esta ridícula fábula, hizo

- fundamento para ser su señorío y magnífico Reyno, el más estimado y venerado entre los Reyes de esta Mixteca."
- 16. In the original Spanish, "Y por lo inaccesible del sitio, que se ha dicho donde tenía su corte, asegurándose ya de no tener más guerras con otras naciones, se pasaron abajo, al sitio que hoy tiene el pueblo en una eminencia de lomería que descuella sobre lo profundo del valle como dos leguas largas del lugar antiguo."
- 17. In the original Spanish, "Pues la antigüedad acostumbró formarlos en las cimas de los montes y cerros sirviendo con estudio sus alturas de murallas para defenderse con flechas y piedras de sus enemigos, al tiempo de sus guerrillas. Se comprueba con el pueblo de Tilantongo que fue la corte del Rey mixteco quien teniendo por suyo el valle tan hermoso y ameno de Yanhuitlán y Nochixtlán, no la tuvo en él, y así en la cumbre del monte de la Tilantongo que se halla en medio de otros más elevados. La entrada de su palacio no era sino una subida empinada, donde se encuentran piedras labradas con tanta finura como si las hubiese trabajado el más diestro arquitecto europeo."
- 18. In the original Spanish, "Al suroeste á distancia de siete leguas de la Villa de Nochixtlán cabecera del Distrito y al pié de una espesa montaña está el pueblo de Tilantongo sobre un cerro de regular estatura, cubierto de encinas y arbustos, encontrándose entre estos muchas viviendas de los vecinos del lugar. Allí existen también las grandes ruinas de los antiguos edificios que en otro tiempo sirvieron de morada á los reyes del Imperio mixteco. El cerro tiene de elevación 464 metros y se llama Yucutnoo que en mixteco significa Monte Negro. Su cima es de forma circular, y tiene 108 metros de largo y 99 de ancho, rodeada de paredes de piedra en toda su extensión. El centro de la cúspide del cerro lo ocupa un formidable montículo artificial, hecho de adobes, y capas de aplanaduras de tierra blanca á manera de fajas unas sobre otras; lo demás de la cima sirvió para asiento de habitaciones, divididas en piezas fabricadas con piedras labradas de color café. . . . Sobre el mencionado montículo donde estuvo el primer templo católico, están fabricando los actuales vecinos de Tilantongo otro nuevo, que llevan avanzado en construcción medio templo." I very much appreciate this quotation, which was given to me by Sebastian van Doesburg. Later, in 2012, I consulted the original document myself.
- I appreciate the collaboration of Mr. Taurino Hernández Cruz, a resident of Monte Negro, who told me the names in Mixtec.

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PART THREE

The Maya Area

Pre-Hispanic Maya Animal Images

CULTURAL IMPLICATIONS FROM CERAMICS OF KNOWN PROVENIENCE

María de Lourdes Navarijo Ornelas



re-Hispanic Mesoamerican cultures have traditionally been studied from a single perspective, that is, archaeological, anthropological, historical, or art historical. However, an interdisciplinary approach that includes such fields as biology offers us the opportunity to reach a deeper, more systemic understanding of the abundant cultural manifestations of the ancient Mesoamericans, who constantly focused on the dialogue between man and nature. In fact, archaeological research establishes that they were dependent on plants, animals, and other natural resources in all aspects of life. Support for this observation comes from study of the codices and the accounts of the early chroniclers. Examining a society through its material works is also useful because these reflect the collective knowledge and interests, including respect and even adoration of the surrounding physical environment.

The present investigation is primarily concerned with establishing the biological identities of animal species that have been depicted in order to better understand their possible cultural significance. In other words, through animal representations we obtain information on material and spiritual concepts that implicitly create and perpetuate the collective communal values of the image at a particular historical moment. This research focuses on a single medium, Maya pottery, which was plentiful and varied, with forms ranging from cups and plates to objects for worship. Most

ceramic items were painted with geometric patterns, but many examples also show animals and human figures. The polychrome ceramic samples studied here belong to different archaeological sites, which means that by determining the zoological diversity of the forms represented, we learn about their broad cultural significance. A main object of this study is to formulate an inventory of the variety of the pre-Columbian species selected as iconographic motifs. I seek to establish qualitatively and quantitatively the most important zoological groups, using the frequency of a species' appearance in the decorative and symbolic designs. At the same time, I consider the types of objects that were chosen for these motifs and the reasons for including the animal species. Having been associated with ceremonial and funerary uses, the pieces are probably indicative of different aspects of elite Maya life.1

The study of identifiable zoomorphic designs on vessels of known archaeological context shifts our attention to the Classic period Maya (approximately AD 300 to 900). This must have been an era when many aspects of the civilization flourished, and we find evidence of advancements in agriculture, technology, and trade, as well as political, social, religious, and military consolidation. The most important ceremonial centers, where science developed and the arts and historical record keeping were practiced, were built. Some aspects of these events can be seen through the various designs of the ceramics

with figurative motifs, in which animals occupied a prominent place.

METHOD

The study group consists of 553 Classic period vessels from fifty archaeological sites in the entire geographic region occupied by the Maya, including the present states of Yucatán, Campeche, Quintana Roo, Tabasco, and Chiapas in Mexico, as well as Guatemala, Belize, and the western portions of El Salvador and Honduras (see map 1.6 for locations). These ceramics, which serve as a representative sample, are discussed in the catalog of Marta Foncerrada de Molina and Sonia Lombardo de Ruiz (1979). They were produced in an area of considerable ecological diversity. The upland contains coniferous forests with pines (Pinus spp.) and fir (Abies spp.) and the high valleys pasture. The lowlands are characterized by the humid tropical and subtropical vegetation of the rain forests, represented by large specimens of mahogany (Swietenia macrophylla), red cedar (Cedrela odorata), sapodilla (Manilkara zapota, whose resin is used to make chewing gum), kapok (Ceiba pentandra, the sacred tree of the Maya even today), and a large variety of semiprecious woods that are endemic to the rain forests. Savannahs are found where the original vegetation cover in the vast tropical forest clearings has been destroyed, whether intentionally or naturally. The lack of soil encourages the development of large numbers of epiphytes and parasitic plants, such as bromeliads and orchids, which obtain their nutrients from the humidity in the air (Álvarez Asomoza 2004, 5).

The varied terrains host a great diversity of species of reptiles, birds, and mammals that have adapted to the different ecological niches. For example, the mammals of the highlands and rain forests include the puma (Felis concolor), the badger, and the coatimundi or coati (Nasua narica). The jaguar (Panthera onca), ocelot (Felis pardalis), and margay (Felis wiedii) are unique to the tropical rain forest. The red and green macaws (Ara macao and A. militaris) are also endemic to the forests, and a variety of parrots (Amazona ochrocephala) migrate from the forest to the temperate forest above 1500 m. Animals from the evergreen forest, now in danger of extinction, include the tapir (Tapirus bairdii), howler monkey (Alouatta pigra), spider monkey (Ateles geoffroyi), "kid" deer (Mazama americana), kinkajou (or mico de noche, Potos flavus), green aracari (Aulacorhynchus prasinus), curassow (Crax rubra), and ocellated turkey (Agriocharis ocellata; Álvarez Asomoza 2004, 7–8). Finally, in the rivers that cross the rain forests and in the wetlands, mangrove swamps, and coastal marshes are three species of crocodiles: *Crocodrilus acutus*, *C. moreletii*, and *Caiman crocodilus* (Álvarez Asomoza 2004, 8).

The basic criteria for the diagnosis of the taxonomic identities of organisms that can be characterized as the primary motif or as significant accompanying elements in the designs on Maya vessels derive from my earlier research (Navarijo Ornelas 2000) and are as follows:

Physiognomic Criteria

These depart from the graphic level of the organism that is, whether the animal is completely represented or only significant parts of it are shown—and proceed to the consideration of design and then to its comparison with characteristics in nature. In particular, I consider the head and facial marks, the general form of the body, and the shape and size of wings, legs, and so forth. Through this diagnostic characterization to establish reliably the taxonomic identities, I have noticed tendencies to stylize the organisms in accordance with certain religious views. Additionally, design was influenced by the themes and uses of the ceramics, which indicate different archaeological contexts, such as burial chambers, burials, caves, offerings, and surface deposits. I take into account remains of color, with the understanding that this feature had strong symbolic meanings in the pre-Hispanic world and that painted hues do not necessarily correspond with those of species in nature. Nevertheless, this analysis incorporates outstanding physical features of species in nature to make comparisons with the species that are presumably shown on the particular ceramic items being studied.

Biological and Cultural Context

The presence of different animal species in the designs of the vessels follows the knowledge, use, and value of these organisms, which were related to their height, physical appearance, and color, as well as peculiarities in feeding behavior and reproduction. These traits as a whole provided a guiding principle that encouraged associations with aspects of daily life, religious and mythical events, and political and military occurrences. I review the geographic distributions and habitat types of the species represented to support the proposed taxonomic identification.

In summary, I have observed that the problem unites two fundamental components, biological and cultural, that may be interdependent to the extent that they meet the requirements of the decorative and allegorical messages. To confirm the importance of the bird images, I compared the results of this analysis with the records of the species identified in mural paintings at six archaeological sites in the Maya area of Mexico, which are of different periods and styles.

RESULTS

In 56 percent of the sites I studied, I found designs with fauna in the ceramic samples, preferentially including bowls, cylindrical vases, plates, and lids. The animals were used as the main subject of the piece or as a prominent iconographic element in its composition, since decorations also include texts written in Mayan that accompany scenes of nobles, military episodes, rulers, and supernatural beings. The number of ceramic samples registered at each of the fifty sites varies, depending on the archaeological work carried out and whether the sherds have been cataloged. Nevertheless, this approach has clear advantages because of the problem of forgeries among the purported members of the pre-Hispanic Maya ceramic corpus. Additionally, countless other pieces have been looted and therefore lack the references that date them and indicate their precise locations. A sample that is out of context is no longer a reliable source due to this loss of important data, such as information pertaining to the life of the person in whose tomb it was interred.

Among the places with a significant record of designs featuring wildlife are three of the eight sites considered in Belize: Altún Ha (83.33 percent), Río Hondo (80 percent), and Quiroz Cave (50 percent). In Guatemala, this list includes eleven of the twenty-four sites: Nebaj (86.7 percent), Holmul (61.11 percent), St. Augustine Acasaguastlán (60 percent), Tikal (53 percent), and Chamá and Chipoc (50 percent each). Also noteworthy are Ilón and the Petén (with 40 percent each), Kaminaljuyú (36.4 percent), Altar de Sacrificios (35.48 percent), and Uaxactún (33 percent). At the two study sites in Honduras, wildlife designs were found in the Ulúa Valley (75 percent) and Copán (56.76 percent). At nine sites in El Salvador (Ahuachapa, El Porvenir, El Salvador,² Hacienda Malpilapa, La Libertad, San Jacinto, Santa Tecla, Soyapango, and Tazumal), 41.7 percent of the shards recorded wildlife designs. Finally, from a review of the forty-nine pieces from fifteen Mexican sites, I determined the following proportions: Cerro Ecatepec, 75 percent; Jaina, Labná, and Joxiha 50 percent each; and Champotón 27.27 percent.

I calculated the percentage ratios according to the total number of pieces from each archaeological site, and the sample sizes are notably different. At eleven places a large number of samples have been found and cataloged, while the remaining sites (thirty-nine) have an average of only 3.25 ceramic shards (table 8.1).3 In some cases, the ceramic sample consists of only one piece, and if it is decorated with the figure of an animal or an animal element, such as feathers or feline fur, then we have 100 percent representation. This is true in the case of Actun Balam, in the Cayo District in Belize, where a fragment of a flatbottomed vessel shows four people hunting two deer in a mythical scene. The same situation occurs with a vase with a flat base from Las Flores, located in the south of Guatemala. Its main design consists of a spider monkey in a position that implies action. A further example comes from Pulai, where two anthropomorphic bat figures are shown in standing positions. However, the subject of some vessels is geometric figures, as we see in the only example from Baking Pot, located on the Caribbean coast of Belize, and the two vessels from Alta Verapaz, in Guatemala. To these designs we must add glyphic forms and various figures in different scenes, many of which carry ornaments and headdresses with feathers.

I classified the designs into two basic groups. The first of these brings together the organisms with essentially naturalistic features, while the second includes samples that show a particular animal presence based on certain elements (such as feathers, bits of feline fur, bird beaks, etc.) and also zoomorphic objects, like the hummingbird masks seen on two vessels from Tikal, Guatemala. My detailed analysis showed that the first group includes vertebrate and invertebrate organisms that represent a total of seven zoological classes and at least thirty-one species of animals (table 8.2). Among invertebrates, the group of insects, with three generic forms, is emphasized. Among vertebrates, the most important class based on the number of forms and families registered is birds, with twelve generic forms. Quantitatively, this is followed by the mammal class, with ten forms recorded, and, finally, the reptile class, with three generic forms. I based these identifications on consultation of specialized literature (Friedmann, Griscom, and Moore 1950; Howell and Webb 1995; Paynter 1955; Peterson and Chalif 1989).

The animal representations that have fantastic forms do not conform to a strict taxonomy. This is mainly

Table 8.1. Archaeological units with the highest number of ceramic samples

SITE/COUNT	RY NUMBER OF SAMPLES
Uaxactún, Guate	mala 88
Copán, Hondu	ras 74
Tikal, Guatem	ala 68
El Salvador	48
Altar de Sacrificios, G	uatemala 31
Zacualpa, Guater	mala 25
Kaminaljuyú, Gua	temala 22
Zaculeu, Guater	nala 19
Belize	18
Holmul, Guaten	nala 18
Nebaj, Guatem	ala 15
Total for 11 locat	ions 426

Note: For an explanation of the grouping of the pieces from El Salvador and Belize, see note 2.

because they are composed of two or more species of animals, which complicates placement within a particular taxon. 4 Such is the case of a piece that comes from Cerro Ecatepec, Chiapas, on which we can distinguish a monkey-rabbit figure. A bird and a jaguar are blended in a record concerning a ruler of Yaxchilán. In a sample from Altar de Sacrificios, Guatemala, and a piece from Río Hondo, Belize, we see six fantastic animals that are remarkable combinations of amphibians, reptiles, birds, and mammals. 5

As table 8.2 shows, the group of birds has the greatest representation, based on the quantity and diversity of species that I have recognized in the designs. Thus far, I have identified members of at least ten families: pelicans, herons, ducks, eagles, parrots and macaws, owls, hummingbirds, quetzals, and toucans (figs. 8.1 and 8.2). Seven families of mammals show diversity in representation, including opossums, bats, monkeys, rabbits, dogs, jaguars, and deer (figs. 8.3 and 8.4). Two snakes, an iguana, and a lizard are the only representatives of the reptiles, although about 704 species have been recorded in Mexico. Generically, frogs and toads are recognizable in six samples, and schematized designs on ceramics depict fish in Belize (1), Chamá (1), Nebaj (4), Tikal (2), and Uaxactún (1) (fig. 8.5).

While the frequency of a particular group of animals or of animals of the same species is indicative of their importance, so also is the depiction of a type of bird in different geographic places: its iconographic significance transcends the local level. For example, species of parrots and macaws are present in the designs of the vessels of Chamá, Holmul, Labna, Nebaj, Oxkutzcab, Río Hondo, and Uaxactún (fig. 8.6), whereas hummingbirds were recorded on vessels found at Altún Ha, southern Belize, Río Hondo, and Tikal.

As for the variety of designs in which objects or garments incorporate faunal elements, I have cataloged twenty-one diverse types. Among them is the principal category of articles made with feathers, such as single plumes, turbans, crowns, and tiaras, as well as layers of clothing or various feather embellishments. We also see feathers in bundles for offerings. We can further distinguish mantles, pants, shorts, gloves, boots, and shields that use the skins of jaguars or ocelots (table 8.3). The importance of examining and cataloging the variety of accessories shown on Maya vessels allows us to conclusively document these symbols of social stratification and ritual. The appearance of animals in these situations to varying degrees indicates the extent of their influence during different periods of Maya history.

Because motifs based on birds constitute the most common iconographic elements in the present study, I continued the investigation by comparing my results with identifications of species in the Maya mural paintings (table 8.4). This review contributes to our broader understanding of the more general role they played in Maya imagery. Considering the uses in quantitative and qualitative terms, I found that ten families of birds are represented on the vessels, while thirteen families can be identified in the murals. Six families appear in both study groups: Pelecanidae (pelicans), Ardeidae (herons), Anatidae (ducks), Accipitridae (eagles), Psittacidae (macaws and parrots), and Trochilidae (hummingbirds). This means that a total of seventeen families are present, without including feather ornaments and clothing, which undoubtedly increases the number of species. The variety of birds indicates that the Maya had considerable knowledge of their diversity. At the same time, this diversity reflects the practical fact that the wide variation in habitat I mentioned earlier sheltered a large number of species for the artists to learn about. Over time, this led to associations that developed into ideas related to metaphorical and iconographic elements. To cite one example, offerings consisted of animals, plants, flowers, incense, ornaments such as feathers and shells, and, among other natural elements,

TABLE 8.2. Faunal groups shown on Maya ceramics of known provenience

ZOOLOGICAL GROUP		ZOOLOGICAL FORM	FREQUENCY
Bivalvia	?	snail	2
Insecta	Dictyoptera	cockroach	1
	Lepidoptera	butterfly	1
	Coleoptera	black beetle	2
Fish	?	different species of fish	9
Amphibia	Bufonidae or Ranidae	toad or frog	6
Reptilia	Iguanidae	iguana (fantastic)	1
	Crocodilia	lizard	1
	Viperidae	snake	2
Birds	?	waterfowl	3
	Pelecanidae	pelican (Pelecanus sp.)	4
	Ardeidae	heron type	2
	Anatidae	ducks	2
	Accipitridae	eagle type	2
	Cracidae	chachalaca type	1
	Psittacidae	parrot (Amazona sp.)	6
		macaw (Ara sp.)	1
	Strigidae	owl	1
	Trochilidae	hummingbird	5
	Trogonidae	quetzal	1
	Ramphastidae	toucan	1
Mammalia	Delphinidae	opossum	1
	?	vampire	1
	?	bat	1
	Cebidae	monkey	14
	Leporidae	rabbit	1
	?	rodent type	1
	Canidae	dog	1
	Felidae	wildcat	1
		jaguar	4
	Cervidae	deer	6

turquoise, obsidian, jade, copper, and gold. Each of these entities held a particular significance.

Size was not necessarily a decisive factor in the design selection process, since smaller species, such as hummingbirds, occur along with larger ones, such as pelicans, buzzards, and eagles (Navarijo Ornelas 2006). The graphic message developed from the manipulation of the birds' physical characteristics and behavior, such as the eating habits of birds of prey or the daily commuting for feeding and dozing of parrots and macaws. Hummingbirds' vigorous defense of their territories

surely must have been observed, exalted, and associated with military action and sacrifice. Seasonal associations of such birds as macaws were significant as well (Navarijo Ornelas 2012). Additionally, the songs of many birds were taken as good or bad omens because the Yucatec word for bird, *mut*, also means "news" (Roys 1933, 148; Barrera Vásquez et al. 1980, 542). The leaders of Maya religion maintained their influence through agricultural rites in public ceremonies, as well as artistic expressions. It seems that one of their goals was to find harmony through the representation of animals that, like birds and snakes,

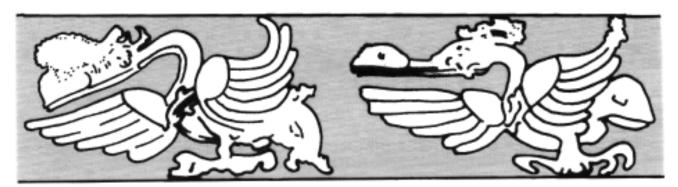


Figure 8.1. A pair of standing pelicans on a vessel from Altún Ha, Belize. Drawing by Felipe Villegas Marques, based on Foncerrada de Molina and Lombardo de Ruiz 1979.

symbolized opposing forces. Finally, I should add that several birds were associated with certain deities. Among these is the heron, which was linked to Itzamna, lord of the heavens and night and day. These concepts were possibly also manifested by Ahau or Kinich Kak Moo, who had the character of a warrior, as well as solar connections, traits that are also associated with the scarlet macaw (*Ara macao*). I see the hummingbird as an epiphany of the sun god. The eagle was associated with the god of rain, but also with the warrior aspect of the sun, and it is known to have been one of the animal companions of the priestly leaders, as a symbol of power. Owls were related to soothsayers and apparently to the god of death (De la Garza 1996). These are but a few examples that justify the presence of birds in artistic expressions.

CONCLUSIONS

The inclusion of a biological perspective in ethnohistorical research brings new elements to the interpretation of pre-Hispanic cultural processes. This investigation has focused on the taxonomies of the animals illustrated in the polychrome designs on a representative sample of Classic period Maya pottery. The basis of the study is the catalog of pieces from known archaeological contexts that was published by Foncerrada de Molina and Lombardo de Ruiz (1979). Representations of fauna were found at 56 percent of the archaeological sites included in the publication, with the images including twenty-nine families of animals, both invertebrates and vertebrates. Thirty-one generic forms are recognizable.

The animals were culturally significant for a variety of reasons. First, we see a selective process in their use as individual iconographic elements, whether these are simple and natural or complex and mixed. We also see their use as components of various items. To the extent that the catalog indicates functions for the ceramic deposits, the latter group communicates aspects of life among powerful members of Maya society and symbolic, ritual significance. The vessels themselves are material proof of the creativity expressed by the culture. In addition to their



Figure 8.2. An owl on the convex exterior of a ceramic from the Ulúa Valley, Honduras. Drawing by Felipe Villegas Marques, based on Foncerrada de Molina and Lombardo de Ruiz 1979.



Figure 8.3. An opossum profile on a pottery shard, Ulúa Valley, Honduras. Drawing by Felipe Villegas Marques, based on Foncerrada de Molina and Lombardo de Ruiz 1979.

undeniable artistic presence, the value of animals is evident from the fact that the images represent more than a few isolated instances. Rather, they are a significant part of the ceramic production that flourished within the vastness of the biological wealth of the Maya area. From the frequency and diversity of the zoological forms represented, I have observed that the greatest iconographic significance was attached to such birds as parrots, hummingbirds, pelicans, and aquatic avians. Among the mammals, monkeys, deer, and jaguars have the greatest prevalence. Fish and amphibians also figured in these animal representations.

NOTES

 Editor's note (MP): The catalog that forms the basis for the study identifies the particular structures where some of the examples have been found according to the number and letter designations assigned in the original archaeological reports. This does not explain per se the functions of the buildings, nor does it show their locations with respect to ceremonial centers where monumental architecture was constructed. The most common purpose listed in the catalog for the samples is as offerings in human burials, and accompanying items, such as jade and shell, establish that these interments were of highranking people. Some of the pottery also comes from caches. At Copán, these were buried at the bases of sculptures (Stelae I, J, M, and 3) that were the monuments of historical rulers (see chapter 1 for further discussion). For a concordance of illustrations in English language sources of many of the examples discussed by Foncerrada de Molina and Lombardo de Ruiz (1979), see table 1.1.

2. Editor's note (MP): Almost all the proveniences of the ceramics discussed by Foncerrada de Molina and Lombardo de Ruiz (1979) are known specifically. However, there are exceptions. Their study encompasses some items from private collections that were published in 1915 by Spinden. For instance, the Spinden (1915, 466) article indicates only that Foncerrada de Molina and Lombardo de Ruiz's illustration 7, on their page 333, was in the collection of Sr. Andres Bang. Foncerrada de Molina and Lombardo de Ruiz (1979, 7–8) treat the ceramics from El Salvador, which have clear influences from local traditions, as a unit that represents a

Figure 8.4. Deer in profile on a jar from Altún Ha, Belize. Drawing by Felipe Villegas Marques, based on Foncerrada de Molina and Lombardo de Ruiz 1979.

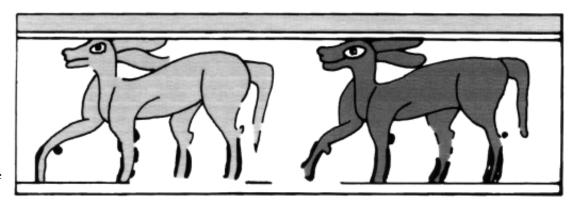




Figure 8.5. Two fish and a bird on the interior of a bowl with a ring base, Nebaj, Guatemala. Drawing by Felipe Villegas Marques, based on Foncerrada de Molina and Lombardo de Ruiz 1979.

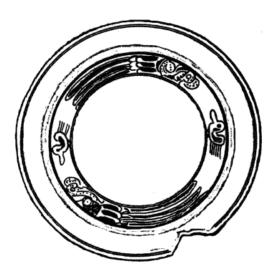


Figure 8.6. Parrots and ducks on the interior of a bowl from Río Hondo, Belize. Drawing by Felipe Villegas Marques, based on Foncerrada de Molina and Lombardo de Ruiz 1979.

TABLE 8.3. Animal motifs on vessels

HEADDRESSES	WITH PLUME, TURBAN, CROWN, AND DIADEM; DECORATED WITH FEATHERS, FABRIC, FLOWERS, BEADS, AND HEADS OF BIRDS, DEER, JAGUARS, OR A FISH
Masks	bird and mammal (monkey, jaguar, or dog)
Cape	made with feathers or only edged with feathers
Mantle	made of jaguar skin
Loincloth	edged with feathers or jaguar skin
Shoes, trousers, gloves, and boots	jaguar skin
Pectoral or back ornament	made of feathers, shells, ribbons, birds, and butterflies
Shield	made of jaguar skin
Standard	topped with bird or serpent heads
Staff	with feather decorations
Throne	with birds or an unidentified mammal at the top, back, or seat; jaguar or wildcat cover
Bench	with wildcat skin
Cushion	with zoomorphic head
Prow-like form	with bird head (ducks, Anatidae)
Vessel handle	with bird or mammal effigy

geographic limit of the Maya style zone. The author of the present study also follows the 1979 research in grouping the samples from Belize.

- 3. The tables are based on Álvarez del Toro 1980, 1983; Flores-Villela and Gerez 1988; Lot Helgueras and Miranda-Arce 1983; Márquez 1995; and Martín del Campo 1940.
- 4. A biological taxon (from the Greek $\tau \alpha \xi \iota \zeta$, transliterated as *taxis*, "ordering") is a group of related organisms that
- form a given classification. Each group has been assigned a Latin name, a description if it is a species, and a type. Each formal description of a taxon is associated with the name of the author or authors who compose it, which follow. The Latin plural, *taxa*, is typically used in English, and in Spanish the form is *taxones*.
- 5. Due to the symbolism of the designs, I did not consider anthropomorphic representations.

STATE	SITE	BIRD SPECIES	
Campeche	Calakmul	Ajaia ajaia	Roseate spoonbill
		Dendrocygna autumnalis	Black-bellied whistling duck
		Amazona albifrons	White-fronted parrot
	Xuelén	Pelecanus occidentalis	Brown pelican
		Phalacrocorax brasilianus	Neotropic cormorant
		Anhinga anhinga	Anhinga
		Coragyps atratus	Black vulture
		Pandion haliaetus	Osprey
Chiapas	Bonampak	Ardea herodias	Great blue heron
Quintana Roo	Xelhá	Ara macao	Scarlet macaw
		Amazona albifrons	White-fronted parrot
Yucatán	Chichén Itzá	Ardea herodias	Great blue heron
		Elanus leucurus	White-tailed kite
		Chloroceryle americana	Green kingfisher
		Chlorophonia occipitales	Blue-crowned chlorophonia
		Guiraca caerulea	Blue grosbeak
	Mulchic	Phaethornis longuemareus or Chlorostilbon canivetii	Little hermit or Canivet's emerald

TABLE 8.4. Birds previously identified in murals at six Mexican Maya archaeological sites

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Fragrances and Body Paint in the Courtly Life of the Maya

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hrough special examinations of containers deposited in the tombs of high-level members of pre-Hispanic Maya society, we know that the prerogatives of their status included access to body paint and fragrances. The current investigation establishes the raw materials that were almost certainly used to prepare these substances. Our findings are drawn from archaeometric investigations made over the last years by the project Archaeometry of Cosmetics and Perfume in Ancient Mesoamerica, which has been conducted at the Department of History of Art (University of Valencia). The samples of the potential cosmetics, which were all red, were found inside ceramic artifacts held at the National Museum of Archaeology and Ethnology (MNAE) in Guatemala. These tomb offerings that accompanied the upper classes are now pigment particles or compacted powders (fig. 9.1). In both of these cases, additives must have been used to bind the colors and provide the textures of the perfumed cosmetic ointments that are characteristic of civilizations of the Old World.

The same technical processes could have been employed in other Mesoamerican cultures, as appears to be demonstrated by the archaeometric results obtained by the project. This analysis relies on samples produced by the Teotihuacán, Tarascan, and Mexica cultures (Doménech et al. 2012, 1043–62). The present research compares these results, particularly those provided by the archaeometric study of funerary cosmetics in the

multiethnic district of Teopancazco in Teotihuacán (Vázquez, Manzanilla, and Vidal 2012, 195-216), with those obtained in the Maya area and reveals a highly developed knowledge held by specialists responsible for the preparation of the products. These compounds had a safe and even therapeutic effect when placed in contact with the skin, in spite of the toxic nature of their high mercury or lead content. Members of the elite classes during the Classic Maya period favored the use of cinnabar as body paint, at least in a funerary context, due to its high symbolic value. It is likely that the experts responsible for the preparation of these substances were held in elevated social esteem, as we shall attempt to demonstrate further on. We also discuss our understanding of the fragrances and body paint technology available to the court and royalty during the Classic period, based on the physical-chemical analysis of samples from archaeological contexts and the analysis of written and iconographic sources that shed light on the subject. The samples in question are from El Perú-Waka' burials 8, 37, and 39 (Late Classic), Tomb 19 at Río Azul (Early Classic), and two miniature ceramics found at La Lagunita site (Late Preclassic).2 The archaeometric analysis consisted of Light Microscopy (LM), Scanning Electron Microscopy-Energy Dispersive X-ray Microanalysis (SEM-EDX), Fourier Transform Infrared Spectroscopy (FTIR), and Gas Chromatography-Mass Spectrometry (GC-MS). These techniques have been



Figure 9.1. Grains of red pigment that form part of a funeral offering on a polychrome plate, Tomb 19, Río Azul, Guatemala, (MNAE Collection, Guatemala: inventory no. 11422). Courtesy of the Museo Nacional de Arqueología y Etnología.

supplemented by an in-depth study of the specialized literature on the technology of perfume and body paint in antiquity as it pertains to the toxicity of some of the products employed by the ancient Maya in their preparations, which allows us to provide this first broad overview of a subject that has been largely ignored to date.³

This work has defined, with a reasonable degree of precision, how the ancient Maya prepared their cosmetic products. It serves as the basis for further investigation into other aspects, such as the relation that undoubtedly existed between the selection of body color and the activity or event in which these adornments were used. Understanding such connections requires thorough iconographic analysis, which is ongoing at the Department of History of Art (University of Valencia).

THE ICONOGRAPHIC SOURCES

The scenes represented on Maya ceramics from the Classic period show numerous activities and customs in the royal courts throughout this period. From these images we may glean an idea about the decoration of the palatial rooms from which royalty governed (Vidal 2006), the types of events celebrated in the courts, the clothing and adornments worn by the participants on these occasions, and other more specific aspects of their physical appearances. Central to the discussion are body paint and fragrances.

The aesthetic and symbolic relevance of these cosmetics explains why Maya royalty were often portrayed at the precise moment when they were applied, as may be seen from scenes recorded on polychrome pottery. The images establish that the privilege of painting the king fell to



Figure 9.2. The application of red pigment, presumably with a cloth made of cotton, to the skin of a ruler (K₇64). Courtesy of Justin Kerr.

members of the court, either men or women, who were accompanied by other persons of high status (fig. 9.2). This social level is indicated by their elegant dress and ornaments (Vidal, Vázquez de Ágredos, and Horcajada 2011, 81-92). The same scenes suggest that the activity formed part of far more complex rituals of dressing the ruler, such as the one depicted in a well-known image (K7268) in which nude women are seen dressing the Maize God after his resurrection. The process could include members of the king's entourage who assisted him, positioning his clothing, headdress, jewelry, and other attributes that legitimized the holder of the office or applying body paint from bowls and vases that were also used as containers for other goods (fig. 9.3). It is possible to compare, for example, the small vessel held in the right hand of the woman who apparently offers tobacco to the ruler (fig. 9.4) with small flasks that have been found by archaeologists (fig. 9.5). These pieces generally contain red pigments and have a long history that dates back to Preclassic times (Vidal 1999, cat. 124-31). Such connections show the types of containers used for these products and their varying sizes and shapes, the classes of instruments used for application of the cosmetics, and the people entrusted with these tasks. However, the same images tell us little or nothing about the mineral- and organic-based substances that composed them or the manufacturing processes required. The current study contributes to our understanding of these concerns

through an examination of the written sources and an archaeometric analysis of archaeological samples.

ANCIENT MAYA AROMATIC ESSENCES

The aromatic essences and body paints used by royalty and members of the court were characterized by their high economic and symbolic value, which largely resulted from the local scarcity or absence of the raw materials required for their preparation. This made it necessary to import these ingredients and even, in the case of vegetable products, to attempt their cultivation in areas close to the palaces.⁴ One of the substances used in the preparation of exquisite fragrances in the Postclassic was the gum resin of liquidambar, which was described by Friar Diego de Landa as *iztah-té*, the ointment used as perfume by high-ranking Maya women (Landa 1997, 64). This gum resin was one of the most sought-after luxury goods in Mesoamerica, whether for the preparation of these toiletry items or as part of aromatic offerings for different uses. Large quantities of the resin were exported from the Maya Lowlands.⁵ Liquidambar was also a major tribute item given to Mexico-Tenochtitlán by certain states, including Puebla. The Matrícula de Tributos (Tribute Roll) records that Puebla's inhabitants paid the immense quantity of eight thousand sacks of this aromatic gum resin to the Mexica (Aztec) capital (Cardós de Méndez



Figure 9.3. A ruler looking into a mirror in a divination rite while a member of the court paints him with red body pigment and another puts a bracelet on him (K6341). Courtesy of Justin Kerr.

1975). However, liquidambar was not the only substance employed in the preparation of fragrances; it was just one of the ingredients of a far more complicated recipe. Landa writes,

[Those women] who can do so . . . add a preparation of odoriferous and very sticky gum which I take to be liquidambar, and which they call iztah-té. This ointment they apply to a sort of briquette like soap, decorated with fancy designs, rubbing it on their breasts, arms and shoulders, until they are very gallant and odorous, as they feel; it lasts a long time without disappearing, according to the quality of the ointment. (Landa 1997, 64)

Two words in this brief statement—preparation and ointment—suggest that liquidambar was one of the ingredients used in the preparation of at least one of the fragrances worn by Maya women of high social rank. The term ointment clearly shows that these products were used as unguents, as were similar substances in other cultures of the ancient world. These peoples had yet to discover the technique of distilling alcohol, which would

prove so decisive in the manufacture of perfume in the Old World from the twelfth century (Giordano and Casale 2007, 30). Up to this time, the aromatic essences used to prepare perfumes and ointments were extracted by the pressing or maceration of roots, barks, leaves, and flowers, which were then placed in an excipient, generally animal fat or a vegetable additive, to filter the aromas.⁷ The use of an astringent substance in the process, such as aloe sap, coriander, or lemon juice, more completely precipitated the aromatic essences in the excipient. On account of its capacity to restrict the moisture content of any organic substance, salt added to the latter ensured the preservation of the perfume (Bourliascos 2004, 12). This is to say that the liquidambar referred to by Friar Landa was used by the ancient Maya as an excipient in the preparation of perfumes that had the texture of an ointment, as he himself documented in his chronicles.

The rich vegetation of the jungles covering the entire Maya area would suggest that various substances were employed as such vehicles during the pre-Hispanic period, though the written sources contain no descriptions and their identities remain to be demonstrated through archaeometry. However, such testing has



Figure 9.4. The dressing of a ruler for a ceremony: a woman holds a small vase in her right hand and draws a thin instrument toward the mouth of the ruler (K3460). Courtesy of Justin Kerr.

identified the use of animal fats in the manufacture of cosmetic products since the Early Classic period, including chromatograms obtained following analysis by Pyrolysis GC-MS of the red pigment (seen as cosmetic red after scientific examination) found in Tomb 19 at Río Azul. The sample was part of the offering found on a polychrome plate that was one of the funeral artifacts. In addition to showing that color and fragrances were used as funeral offerings made by the Lowland Maya, and probably those of other regions, since at least the Early Classic, this discovery also provides scientific evidence that from these early times the civilization already had considerable technical expertise. Specialists with the knowledge required to prepare aromatic substances differed little, if at all, from those employed by other cultures throughout antiquity, and neither did at least two of the basic ingredients of the formula: the aromatic essence and the excipient. The identification of the latter component as an animal fat further reinforces the similarity of fragrance preparation in the Maya area to that of other ancient civilizations where protein substances, and subsequently those of animal source, were widely employed as excipients.8

Ingredients like animal fat gave the perfumed ointments a creamy texture that was considered far superior to the characteristic oiliness of excipients of vegetable origin (Bourliascos 2004, 5). Given the arboreal diversity of the Maya jungles and the fact that the compounds were largely prepared on the basis of local products, however, it is likely that excipients of vegetable origin were far more prevalent than in many other ancient cultures, including those of the Central Altiplano in Mesoamerica. We should also consider the possibility that the selection by the ancient Maya of excipients of vegetable or animal origin for the preparation of fragrances was at least partially conditioned by the social class to which their users belonged. This has been argued for the ancient Mediterranean cultures, where the use of vegetable oils as excipients was restricted to more refined products that were reserved for a select elite group (Maderna 2009, 101). A determination of the exact excipients used and answers to other similarly important questions require further archaeometric analysis of specimens similar to the red pigment found in Tomb 19 of Río Azul, which we should now interpret as a reddish-toned aromatic ointment with



Figure 9.5. A miniature jug with the form of a gourd, La Lagunita, Guatemala (MNAE Collection, Guatemala: inventory no. 22487a). Courtesy of the Museo Nacional de Arqueología y Etnología.

cosmetic properties that employed animal fat as an excipient.

We now consider the aroma of this and other perfumes and the types of roots, barks, leaves, and flowers that were pressed or macerated to extract essential oils. These were then filtered in the organic excipients referred to in written sources. The historical chronicles do not specifically mention the use of any particular fragrant substances for this purpose, and the physical-chemical analysis of these funerary offerings has similarly failed to identify their nature to date. However, it is possible that the repeated iconographic representation of flowers, such as the water lily (Nymphaeaceae ampla), as part of the headdresses of royalty points toward the original source of these aromas (fig. 9.6). However, the water lily held other associations, like that of the decapitation sacrifice, and in its recurrent representations in Maya art it was frequently portrayed as a womb, conceiving and giving birth to the Maya gods (Velasco and Nagao 2006, 30). It is also possible that the scented essential oil extracted from this flower by pressing or maceration was understood by the elite classes as an aromatic liquid prepared by a group of specialists of equal standing. Once these and other highly scented flowers had been macerated, the same specialists would decide which aromatized waters could be used in the preparation of ointments with cosmetic properties for use by royalty and other members of the court, as was common among other ancient civilizations of the Old World (Maderna 2009, 105).

Archaeometric results and art historical research on other ancient civilizations have identified the aroma of the lily as one of the favorites among the elite classes of republican and imperial Rome,9 as well as pharaonic Egypt. 10 The cones of perfumed incense that are represented on the heads of these users provided aromas reminiscent of the lily flowers on the headdresses of Maya royalty. To summarize, the lily-scented ointment may well represent one of the recipes used by the ancient Maya that resulted from the precipitation of the aromatic essence of this flower in a vegetable- or animal-based organic excipient. This may have been the oily resin of liquidambar referred to by Friar Landa, the animal fat analyzed archaeometrically in the red cosmetic found in the funeral offering of Tomb 19 at Río Azul, or another excipient yet to be identified. Small vials made from alabaster, greenstone, or other stone materials should have preserved these products in the best possible state because their cool surface temperatures would have prevented the rapid evaporation of the volatile aromatic essences after they had been filtered through the organic excipient. The



Figure 9.6. Four men with lily headdresses being dressed for a dance: the principal dancer is flanked by two attendants; one of the subordinates applies body paint, while the other holds a flower (K3009). Courtesy of Justin Kerr.

unguents that were stored in these vials and the other narrow-necked ceramic vessels that abound in this archaeological context would have been precisely applied using thin bone or shell spatulas.

THE SYMBOLISM OF THE LILY AND ITS FRAGRANCE IN MAYA COSMOVISION

The word perfume is derived from the Latin per fumum (through smoke) and refers to the most ancient and sacred use of the substance in the Mediterranean as an incense and aromatic offering in cult ceremonies to the gods.11 Some of these deities took on the role of instructing the distinguished priestly caste on the arts of preparing these sacred perfumes and body paints, and this role was often assumed by the gods who invented and passed on knowledge related to writing and art. 12 In this respect, it should be noted that one of the emblems worn by the god Itzamnaaj on his headdress, and by extension by the scribes and artists to whom he was patron, was that of a flower, particularly a water lily (fig. 9.7). This in turn served as a throne, while also acting as the main demiurge in the creation of the world, as related on Stela C from Quiriguá (Freidel, Schele, and Parker 1999, 62).

The relation between the water lily and Itzamnaaj, and more precisely between this god and the scent of this flower, suggests that the deity not only passed on knowledge related to writing and the arts, but also knowledge related to the preparation of other items such as sacred essences, much as in the ancient cultures of the Mediterranean. The symbolic significance of floral aromas among the pre-Hispanic cultures of Mesoamerica in general and among the Maya in particular-who represented their ancient gods as having been born inside flowers and subsequently enveloped in their perfume seems to reinforce this hypothesis. These floral essences, which, as in the case of the lily, often had hallucinogenic properties (Evans and Hofman 2000, 50, 72), were related to the Mesoamerican concept of breath or soul (Boucher, Campaña, and Palomo 2004, 374). This was something so sacred that only the gods knew the process concerning its treatment and use. These deities then transferred their knowledge to an elite group within the court, perhaps to artists of noble origin, who would then have held such titles as ah na'ab, "he of the water lily," in allusion to their patron gods (Schele and Miller 1986, 138, 142).

Friar Diego de Landa (1997, 139–40) mentions the pleasant aroma of the *tixzula* and *ixlaul* roses, and the two species may also have been valued by the ancient



Figure 9.7. The god Itzamnaaj, in his characteristic flower headdress, with the Moon Goddess behind him (K504). Courtesy of Justin Kerr.

Maya for the preparation of fragrances. In order to confirm this idea, however, it would be necessary to take samples from the vast array of vessels that were left among the grave goods of the Maya nobility. Identifiable, though microscopic, traces of the organic products that were originally held in these areas are frequently found in the cracks, fractures, and chinks of the ceramic pastes. As all these vessels were containers, it is very hard to believe that they were left empty when they were deposited in these distinguished tombs. Rather, they must have been used to hold mineral- and organicbased offerings that have since disappeared (Baudez 2004, 266). The vessels could have accompanied the deceased on their final journeys, or they could have been used in the development of post-interment ritual ceremonies that were carried out during the openings of these tombs on specific dates, 13 as mentioned in the texts documenting these events (Eberl 2005, 116).14 The extensive information that may be gleaned from the analysis of organic remains regarding the types of posthumous ceremonies and the funeral customs of the ancient Maya in general makes it necessary to conduct meticulous examination of these items within the

context of the excavation, before the traces are destroyed during cleaning and restoration work.

BODY PAINT AND DAILY LIFE IN THE COURTS

It is difficult to find a single pictorial representation in which Maya royalty and the members of their courts do not demonstrate a striking use of body paint in the different events that formed their lives. The amount and choice of body paint were not random, but followed exact specifications determined by the nature of the event and the role played by each of the participants, as was noted in the texts of Landa and other chroniclers. The images of the Classic era show that red, which was employed for great ceremonies or festivities, was the most widely used color. The custom continued into the period of Spanish contact, and Landa (1997, 42) observed that "to them it seemed handsome."

The substances employed to prepare body paints were most likely based on organic materials of vegetable or animal origin. Cochineal (*Dactylopius coccus*) and

especially achiote (Bixa orellana L.), on account of its ready availability and cultivation in the Maya area, would have served as two excellent options. In addition to these two nontoxic colorants that are ideal for skin application, other mineral-based colorants with a thicker texture would have provided better coverage. In many cases, these have survived inside the clay containers in which they were stored, as is true of examples with a reddish tone from Río Azul, El Perú-Waka', and La Lagunita, mentioned previously. The most representative of these pigments is cinnabar, which in combination with hematite and certain aromatic resins applied in thick successive layers was used as a form of shroud for the royalty of Palenque (Tiesler and Cucina 2010, 91-98).15 Resinsoaked cloths interspersed with layers of pigments were commonly used elsewhere by the ancient Maya, as at Calakmul (Carrasco 2004, 231-44; García-Moreno and Granados 2000, 28–32; and García-Moreno 2005, 207). 16 The shrouds found at Palenque, based on layers of resin and red pigment of highly symbolic value, represent the consummate use of this pigment within the burial practices of the ancient Maya. This body paint prepared the corpse of the king for his passage to the realm of the ancestors, and, no less importantly, it was a second, enveloping skin to guarantee its sacred preservation.

While we do not know whether cinnabar was also used in daily life, or whether the most commonly used body pigments were based purely on nontoxic substances, it does seem possible that cinnabar was applied in very small quantities and in combination with other pigments and elements as a sign of social identity in certain ceremonies (Vela 2010, 12). Furthermore, the archaeometric identification of cinnabar on the seals that served to stamp the body paint onto the skin seems to confirm the use of this pigment among the higher social classes (Gazzola 1995, 33). However, the frequent application of mercury sulfide to the skin could have had various harmful effects ranging from acute gingivitis to death. The pigment also had the potential to cause severe anemia and serious gastrointestinal and neurological disorders, among other complaints of similar severity (Marcereau 2002, 42), if it was not made by specialists who were fully aware of the procedures to reduce its toxicity or who did not know how to give it therapeutic properties.¹⁷ Mercury was used in ancient prescriptions for lotions that treated infections (Gazzola 1995, 78), and this compound also occurs in medicines for ophthalmological problems and other diseases that are difficult to cure, such as syphilis. The prescriptions are based on a mixture of cinnabar and

other elements, particularly hematite. Such uses have prevailed from antiquity to the present day (Yeoh, Lee, and Lee 1986, 107–11).

The recent sampling and analysis of red pigments of funerary origin found inside the containers that form part of the permanent collection at the MNAE seem to provide scientific evidence of the ancient Maya knowledge of such prescriptions since at least Early Classic times. We have established that the red pigments from Tomb 19 of Río Azul, in Burials 8, 37, and 39 at El Perú-Waka', and in the interior of two ceramic miniatures from La Lagunita were primarily made from cinnabar mixed with hematite. Due to the great symbolic and economic value of cinnabar that developed based on the relative scarcity of deposits in the Maya area, the intentional blending of it with other pigments and components can only be explained as modifications to mitigate risks to the health of its users. Recipes such as these must have been more common in pre-Hispanic Mesoamerica than has been previously thought, and the archaeometric results gathered from the burials in the multiethnic district of Teopancazco (at Teotihuacán), and most prominently in Burial 105-106, identify two preparations. One of these is the previously described mixture of cinnabar and hematite. The other is based on galena and carbon (Doménech et al. 2012, 1043-62) and is identical to the gray-colored eye cosmetic known as kohl in Egyptian, Near Eastern, and Far Eastern cultures (Courau et al. 1990; Janot and Vezie 1999, 217–32). This formulation allowed application to human skin without harmful effects from the high lead content of the galena (Vázquez de Ágredos, Manzanilla, and Vidal 2012, 195-216).¹⁸

Hematite, including the iridescent specular variety of the mineral, was, after cinnabar, the second most widely used pigment in body painting. This colorant came from the geological formations of red earth with high ferric content that were so abundant in the Maya area. It was used on all manner of surfaces: in architecture, on ceramics, and as body paint, where it was not harmful to the skin. The texts found in Classic period tombs describe the use of what was identified as hematite (*nab*') as a body pigment in after-death ceremonies held inside the burial chamber after a ritual reopening. Additionally, in relation to the secondary burials of skeletons, the texts of Altar 1 at Naranjo (Glyph G12) and the Dos Pilas hieroglyphic stairway (Glyph D3) mention the tinting of bones with hematite (Eberl 2005, 118).

Other warm-toned ferric pigments must have been needed to compose the range of red, orange, pink, ochre,



Figure 9.8. A palace scene showing a ruler and a lady who both have red body paint (K2573). Courtesy of Justin Kerr.

and yellow hues that were worn on numerous occasions by the dignitaries illustrated in courtly scenes in Maya painting. Other probable mineral colorants include goethite, limonite, and ilmenite, due to their local source and excellent properties as body paint. They have good coating capacity, and their composition allows skin contact (fig. 9.8).

While the warm-hued pigments, and particularly the red and orange shades, were more widely employed at the Maya courts of the Classic period, iconographic representations and discoveries of other pigmenting materials inside numerous funerary pots left in various elite tombs show that other colors were also used for body painting, though to a lesser extent. The black and gray markings on the faces, upper bodies, hands, and feet of the ball-game players shown in figure 9.9 may well have been made with vegetable carbon, manganese oxide, pyrolusite/manganese dioxide, and even galena. Samples of all of these substances from the interiors of Classic period funerary vases have been precisely characterized archaeometrically (Iglesias 2003, 217; Vázquez de Ágredos 2009, 61-73). Furthermore, some of the figures depicted on the polychrome ceramics show dramatic use of white body paint

(fig. 9.10), possibly lime whites mixed with highly porous white clays, such as attapulgite or sepiolite, and very pure gypsum whites. They are even known from collections at ground level, which suggests that these remains were originally wrapped in bundles of an organic nature, possibly textiles, banana leaves, or other similar wrappings. The offerings of blocks of gypsum that appear in the Classic period tombs II-4 and II-6 at Calakmul are of particular interest (García-Moreno 2005, 305), and it should be noted that the use of this material as a cosmetic in the Old World has been well documented (Walter et al. 2009, 45). Finally, we have the green earths, such as glauconite, celadonite, or chlorite. The latter has been identified inside one of the funerary vases in a tomb from the Early Classic period in the Maya Lowlands (Iglesias 2003, 217; Vázquez de Ágredos 2009, 61-73). Green pigments do not commonly appear in the Maya area but could have been used on certain occasions and ceremonies. The iron- and clay-based composition of any of these earths lent the pigments a far better cosmetic property than those based on basic carbonates of green and blue copper, known as malachites and azurite, which circulated on the Classic and Postclassic trade routes.20





Figure 9.9. Ballgame players with chests, arms, and legs painted in black and face and hands painted in gray (K2803). Courtesy of Justin Kerr.

CONCLUSIONS

The results presented here are an initial attempt to show how cosmetic compounds, notably colors and probably also fragrances, were created for use by the most elite members of ancient Maya society as a means to reinforce their status. We have relied on several lines of information, including analyses of residues found in funerary contexts; we have examined trace amounts that have survived in burial offerings, as well as materials associated with the corpses that were interred. We have additionally studied the scenes painted on Classic period polychrome pottery for further insights into how the substances could have been used by their owners and how they were given economic, social, and symbolic value.

Our archaeometric analysis determined that some of the most important pigments were iron based. They are hematite and red earths of different compositions, particularly goethites. These are the only reds with cosmetic properties that have been identified from an analysis of the study samples from the MNAE. All of these came from Río Azul (Tomb 19, Lowlands), El Perú-Waka' (Burials 8, 37, and 39, Lowlands) and La Lagunita (Highlands). The animal fat employed as an excipient in the red pigment found in Tomb 19 of Río Azul also suggests that the end product would have been a perfumed ointment with cosmetic properties. It would have been quite similar in terms of manufacturing technique and texture to the formulations of other ancient cultures. Elsewhere in Mesoamerica, this would have included a compound that has been found at Teotihuacán (Doménech et al. 2012, 1043–62). The aesthetic effect of the iron varied with the grinding process. The coarsest treatment gave a translucent effect to the body pigment, while the smoothest provided better coverage. Aromatic additives to the typical base of protein or polysaccharide-based excipients—animal fats or vegetable glutens—must have ensured their popularity.

We may ask whether cinnabar was one of the body paints routinely worn by the members of the court, particularly the king, in Classic times. While it is not possible to answer this question to date, it is tempting to believe that the mixtures of cinnabar and hematite that have been identified among the samples considered in this study are not fortuitous, that they are the result of specific formulas aimed at reducing the toxic nature of mercury in



Figure 9.10. Three figures with white-painted faces who carry offerings to three similarly painted men (K6067). Courtesy of Justin Kerr.

cinnabar-based body pigments. However, only the archaeometric identification of mercury in human hair would conclusively support this hypothesis, and it is highly unlikely that any will be found with the skeletal remains of the Maya royalty (Tiesler, personal communication 2012).

The substances discussed here were applied to the bodies in the tombs, either as part of the mortuary treatment of the corpses of the rulers, as has been suggested by a number of authors with respect to highly toxic pigments such as cinnabar (Tiesler and Cucina 2010, 91-98), or as part of the posthumous rituals celebrated by the Maya at specific intervals after their deaths (Eberl 2005). The use of these items in postmortem rituals and ceremonies further reinforces the significance of these goods, even as it justifies the selection of such costly pigments as cinnabar. As all the remains of pigments with cosmetic properties from the Maya area have been found in funerary contexts, we should be cautious regarding their potential use by distinguished members of the Maya court during their lifetimes. Relying on direct evidence, we can only be sure that these were used in the burial areas in which they were found. However, the iconographic representations on ceramics and wall paintings show that the red pigment in all its different hues and tones, from the darkest brown to the brightest orange, was the most widely used body paint in the courts of the Classic era. It is only the most richly attired figures in these scenes who appear with painted bodies, which supports an interpretation of cosmetics as a symbol of status in life, as well as in death.

Finally, these body colors included aromatic substances, in accordance with historical writings, iconographic sources, and the first archaeometric results. These scented colors were similar to those used in other ancient cultures from the Old World, such as Sumer and

ancient Egypt, Greece, Etruria, or Rome. The gum resin of liquidambar and the aroma of the water lily were almost certainly two of the favorite fragrances among the ancient Maya. The versatility of use of colors and fragrances—as body paint and in medicine and ritual—was common to all ancient civilizations, including the Mesoamerican cultures. In ancient Maya society, the use of scented body colors to treat and embalm royal and aristocratic corpses, such as the Red Queen of Palenque (Vázquez de Ágredos and Tiesler 2015, 33–34; Vázquez de Ágredos, Vidal, and Horcajada forthcoming), and as offerings to the deceased constitutes one of the most revealing ritual settings in which to identify and study the triple aroma-drug-rite association.

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NOTES

- This project was developed between 2011 and 2014. Its successor is the current project Aroma, Color and Culture in Ancient Mesoamerica, which began in 2015.
- For further information about these contexts, see Freidel, Escobedo, and Meléndez 2013; Navarro-Farr and Rich 2014; Adams 1999; Ichon and Arnauld 1985. For the

- locations of the places, see map 1.6. El Perú-Waka' is located about 37 miles west of Tikal, and La Lagunita is about 40 miles north and slightly west of Kaminaljuyú.
- 3. The lack of studies on body paint and fragrances used by the ancient Maya is in deep contrast to the attention given to the subject by researchers of the Mexica culture, which has led to several theses and publications of interest: Galdemar 1987; León-Portilla 1992; Acosta Nieva 2007; Taladoire 2007.
- 4. Regarding arable areas adjacent to the palaces, Landa (1997, 41) noted, "Away from the house the entire village sows the fields of the chief, cares for them, and harvests what is required for him and his household." The presence of vegetable plots and gardens where species from other regions could be planted and grown has previously been suggested in relation to the gardens that formed part of the surroundings of the monumental architecture of Central Mexico (e.g., Heyden 2006, 18–23).
- 5. The most common species producing liquidambar in the Maya area was the *Pinus patula* Schlechtendal and Cham. *Cyperus* (Chiapas), *tsiin* (Oaxaca) and *ocotl* (Central Mexico) were some of the other names by which liquidambar gum resin was commonly known in Mesoamerica (Villamar 1994, 1060).
- 6. The authors indicate that the technique of distilling alcohol was first put into practice around AD 1100, possibly at the Medical School of Salerno. It was not until the fifteenth century that it was used to prepare the perfumes of ethereal consistency now known. In any event, the first attempts to distill alcohol with any degree of success took place in the Old World, as demonstrated by important archaeological findings and, not least, the "Taxila distillery," a very rudimentary distilling vase discovered in the Indus Valley that dates to the start of the third millennium BC (Maderna 2009, 100).
- 7. Similar technical processes, based on the precipitation of an organic substance over an inert substrate to fix the same, were widely known and controlled by the Maya from the Late Preclassic. They were already employed at this time to prepare pigments from colorants, specifically Maya blue (Vázquez de Ágredos 2010, 113).
- 8. In ancient cultures it was common to incorporate beeswax when the preparation of these perfumed ointments was based on the use of animal fats as excipients, as this substance prevented the rapid deterioration of the product due to high temperature (Bourliascos 2004, 5). Beeswax was one of the main products exported from the Maya Lowlands in the north to other regions, mainly those on the high plateau. There it was used for many different purposes, probably including the preparation of these products.
- 9. The lily was used to prepare the refined perfume known as *illirium* or *lirium*, which was made from the aromatic essences from lily oil, myrtle, and bay oil (Giordano and Casale 2007, 49).

- 10. Together with other important oils such as balanites oil (*Balanites aegyptiaca*), olive oil, and almond oil (Lucas 1962, 86).
- 11. Its importance was so pervasive that in some of these ancient cultures a specific perfume was offered to each deity, as described in the eighty-seven hymns attributed to Orpheus that suggest the fragrances corresponding to each deity, such as the perfume of moss for Juno, aloe for Mars, and ambergris for Venus (Giordano and Casale 2007, 40).
- 12. Perfume in the ancient world, in addition to existing as an ointment, was also applied in the form of a compact powder, which is to say as a cosmetic. One example of this use by the pre-Hispanic societies of Mesoamerica is found among the Mexica, who made a powdered perfume taken from the *yauhtli* (cloud plant). During their sacrificial rituals, the feet of the gods and the faces of those to be sacrificed were dusted with it (Velasco and Nagao 2006, 34).
- 13. The opening of the tombs of the Maya royalty was part of a series of practices to honor the dynastic ancestors and similarly served to strengthen the bond with their predecessors and legitimize the power held by their heirs to the throne. The tombs were reopened at relatively regular intervals, coinciding with the anniversary of the death or burial of the deceased king. Ceremonies were conducted in the tombs, and during them rulers made various offerings to their ancestors. These observances were followed throughout the Classic period and have been documented in texts and by archaeological findings in such important cities as Piedras Negras, Seibal, Toniná, and Copán (Fitzsimmons 1998, 271–78).
- 14. These texts indicate that Maya funeral ceremonies were conducted in three stages. Of particular significance was the perfuming of the burial chamber with sacred fragrances. The first of the three stages was to "give burial" (muhkaj) within ten days of death. The tomb was then reopened between one hundred and four hundred days after death for the "smoke ceremony" (naah), which would regain importance several years later when the tomb was reopened once again to provide additional treatment of the skeleton, including the tinting of the bones by red hematite (nab') pigment (Eberl 2005, 109).
- 15. The body of the Red Queen of Palenque was embalmed in a solid layer of red pigment identified as cinnabar. The funeral shroud of K'inich Janaab' Pakal, also of Palenque, was made by applying successive thick layers of cinnabar, hematite, and an organic additive (Tiesler and Cucina 2010, 93).
- 16. The archaeometric study of the shrouds covering the corpses in tombs at Calakmul shows that they were made by the overlapping of successive layers, although not all of these have been preserved. The deceased were dressed in cotton clothing and adorned by precious greenstone and shell objects before being covered in powdered cinnabar. After this first layer of pigment, the corpse was wrapped in a

cotton cloth, sometimes smeared with calcium carbonate, and then sealed with very fine successive layers of resin and calcite. The latter material was also used in combination with fiber to seal the opening left in the shroud. This was finally covered with very fine alternating layers of cinnabar and lime substrates and textiles (García-Moreno 2005, 229–30).

- 17. The high toxicity of cinnabar explains why experts in physical anthropology are of the opinion that this pigment was used to cover the shrouds of the Maya royalty once the corpses had been deposited in their funeral chambers in order to delay the onset of decomposition (Tiesler and Cucina 2010, 94–95).
- 18. In other cultures of the Old World, the treatment of lead with other components such as honey also reduced its harmful effects as a product for body beautification, specifically as a hair dye for women of high social standing. This is described in a recipe from the second century AD that, as with kohl, included vegetable carbon among its ingredients. This has been verified by bone analysis of individuals who had used it (Walter 2009, 45).
- 19. See note 14.
- 20. Among the high social classes of Egypt, these mineral pigments, particularly malachite, were widely used as eye cosmetics from the Predynastic period.

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Chapter Ten

The Social Context of Food at Calakmul, Campeche, Mexico

IMAGES PAINTED ON THE PYRAMID OF CHIIK NAHB'

Ana García Barrios



ood was a key component of the wide range of pre-Hispanic Mesoamerican articles that were sold or traded. Among the edible commodities, corn was undoubtedly the most important to all the cultures that lived in the region. Its cultivation favored a sedentary lifestyle and social, economic, and ideological development, and it occupied a prominent place in the realm of the sacred (Alarcón 1999, 18). From the first great cultures, such as the Olmec, to the numerous later polities-those of Teotihuacán, the Zapotec, the Mixtec, the Maya, and the Mexica—that dominated much of the region prior to Spanish contact, the god of corn was venerated because the creation of all humanity was attributed to him. Besides corn, other foods, such as cocoa, beans, and squash, were also part of the diet, as well as the ritual and economic life.

Images on Classic Maya vases show scenes inside palaces where dignitaries accompanied by priests and scribes are surrounded by cups, plates, and bowls of food. The dishes usually did not specify the food for which they were created, but they were occasionally mentioned as *lak* (receptacle for eating), which is the same as the present Yucatec Maya word for the bowls used on the Day of the Dead (personal communication from an elderly resident of Becal 2011). However, hieroglyphic texts written on these containers do sometimes identify the items served in them. Beverages such as cocoa and atole are the most

frequently mentioned, and the texts sometimes specify their flavors. Cocoa, for example, is described with adjectives like cool, bitter, and sweet. Each of these drinks was consumed from a specific vessel. For cocoa, a tall, thin cylindrical shape was typical, while the beverage *ul* (atole) was associated with the same form or with a bowl having a concave base (Coe 1973; Stuart 1988, 1989, 2005; Houston, Stuart, and Taube 1989; Macleod 1990; N. Grube 2001, 32-33; Martin 2006). Recently, Marc Zender (2000) and Erik Boot (2003) have found the glyphs b'i' sak chi (dish for eating white-tailed deer). Christopher Goetz (personal communication 2009) notes that this was the favorite food of the elite, while ordinary people ate common deer. From information recorded by the chroniclers, we also know that some dishes were used to serve birds cooked in broth (Coe [1994] 2004, 187).

The question of how the food was prepared is largely unresolved, but as I will discuss, some of the images and accompanying texts on the Pyramid of the Paintings at Calakmul reveal a great deal about this. Also, clay figurines from Jaina, Campeche, and Lubantun, Belize, represent women cooking. In the Postclassic codices we often see the gods and supernatural beings participating in other activities that involve food, especially corn and cocoa. The texts of the *Dresden Codex* and the *Madrid Codex* specify the names of foods that are offered in different ceremonies. According to Victoria Bricker (1991), pages 29b and 30b of

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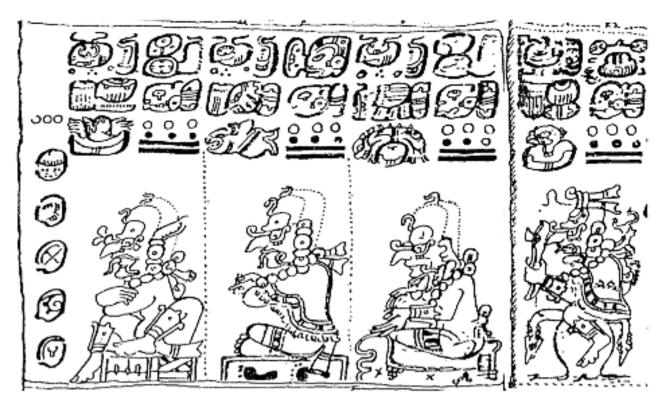


Figure 10.1. Tamales, made of turtle, fish, iguana, and turkey, used as religious offerings, *Dresden Codex*, pages 29b and 30b. After Villacorta and Villacorta (1933) 1977.

the *Dresden Codex* specify certain offerings to the gods of rain: tamales made of turtle, fish, iguana, or turkey (fig. 10.1, drawn immediately to the left of the numbers written with bars and dots). Similarly, a Postclassic period mural from Structure 12 at Tancah shows rain gods (known as *chaahk*) offering food, possibly tamales, during a ritual (Lombardo de Ruiz 2001, 139, lam. 28).

Until a few years ago, the known representations of food in mural painting were limited to those on painted capstones, such as Capstone 1 from Santa Rosa Xtampak, in the Yucatán Peninsula (state of Campeche). These capstones usually feature the god K'awiil accompanied by large baskets or pots that hold corn, either ground or as grains, and cocoa (Staines Cicero 2001, 2009). In the last decade, the discovery of new narratives painted at the sites of Calakmul (Campeche, Mexico) and San Bartolo (Petén, Guatemala) have provided additional information about foods and their importance in the religious, political, and ceremonial order of the Maya (see map 1.6 for the locations of these sites).

The focus of the present research is the pictorial narrative recorded on the Pyramid of the Paintings at Chiik Nahb' in the ancient Maya settlement of Calakmul. The structure has three phases, and the style of the glyphs found in the paintings indicates that all three are Late

Classic. The chronology derived from ceramic evidence is consistent with the glyphic style, suggesting a placement between AD 620 and 700 (Boucher and Quiñones 2007, 47; Martin 2012, 61–62), and images on the pyramid include a large number of scenes that revolve around food and drink. The analysis presented here is based on a multidisciplinary approach that considers both iconographic and epigraphic information. I compare these data with colonial accounts and modern ethnographic reports to investigate the foods that the Classic period Lowland Maya ate and drank and in what contexts. More broadly, I have researched those foods whose appearances provide information that helps us interpret these Calakmul images. I also consider the names of the utensils and the methods used in the preparation of the food depicted.

The discussion of the general significances of the scenes on the pyramid is ongoing. Some authors believe they represent a market (Martin 2012, 85–86). Others initially described them as preparations for a feast or ceremony in which everything revolves around the preparation of food, especially corn (García Barrios and Carrasco Vargas 2008, 692). In my opinion, new paintings discovered in recent years suggest the delivery of tribute, in addition to the market. In any case, the activities portrayed indicate a complex social and ideological

system (García Barrios and Carrasco Vargas 2008, 694; Carrasco Vargas and Cordeiro Baqueiro 2012, 29).

Before describing the scenes chosen for this discussion, I will explain their positions on the Pyramid of the Paintings. The nomenclature indicates the four corners of the pyramid: southeast, southwest, northeast, and northwest. Two of the three levels of the pyramid have been excavated and are referred to as 1 (bottom) and 2 (middle). Finally, the painted sections are labeled from left to right with letters that indicate their positions in a clockwise sequence. For example, we refer to SE-S1, which is the scene on the southeast corner, oriented toward the south, on the first tier (Carrasco Vargas and Cordeiro Baqueiro 2012, 14; Martin 2012, 62).

THE PYRAMID OF THE PAINTINGS, STRUCTURE 1 OF CHIIK NAHB'

As pointed out by Beatriz de la Fuente (1995, 7), the exterior walls of Classic period buildings were often uniformly painted with solid colors, whereas designs and scenes were reserved for interiors. This was the pattern that was known in the Maya area until 2004, when the excavations in Structure 1 of the Chiik Nahb' acropolis revealed an unusual pyramidal substructure that has polychrome murals on all of its facades (Desprat 2006; Vázquez López 2006; García Barrios and Carrasco Vargas 2008; Carrasco Vargas, Vázquez López, and Martin 2009; Carrasco Vargas and Cordeiro Baqueiro 2012; Martin 2012). The Pyramid of the Paintings is in the center of the acropolis. It was designed during the beginning of the Late Classic, with a base that is cruciform in plan, and its three levels have stairways on all four sides. It is likely that the construction was originally painted with a total of forty-eight different scenes. Thirty-six of these are now known, with twelve in each corner (fig. 10.2). As previously mentioned, the third body remains to be explored (Vázquez López 2006; Desprat 2006; García Barrios and Carrasco Vargas 2008; Carrasco Vargas, Vázquez López, and Martin 2009; Carrasco Vargas and Cordeiro Baqueiro 2012, 13).

The scenes record an event featuring males and females of high rank, as indicated by their dress and ornaments. They mainly handle food and beverages, taste these items, carry loads, and transport various objects and blankets (García Barrios and Carrasco Vargas 2008, 690–93; Carrasco Vargas, Vázquez López, and Martin 2009; Carrasco Vargas and Cordeiro Baqueiro 2012, 28). These data suggest that the subject of the paintings may be the delivery or exchange of goods, accompanied by a

ceremony or celebration in which the nobles of the court taste foods and beverages. This is comparable to the polychrome scenes that occur on Classic period ceramic vessels. Women are usually in charge of preparing and handling the food, while men, probably the true protagonists of these scenes, are those who eat and taste. These actions—the sharing and consumption of food—provide the movement of the scenes. The human figures are accompanied by brief texts, read in 2012 by Simon Martin, that confirm the importance of the commodity that is indicated by the iconography.

The vast majority of the texts concerning food that have been interpreted are located in the southeast and northeast corners (Carrasco Vargas and Cordeiro Baqueiro 2012, 14). The structure of the texts is consistent, beginning with the agentive *aj* ("he," "she," or, more generally, "person").² This is followed by the name of a particular food, as in, for example, "person of atole." These scenes are accompanied, in the southeast corner, by large glyphs painted in the recessed panels between the bottom and middle levels (see fig. 10.2). The series, which is repeated on both sides of the corner, consists of three units. According to the project epigrapher, Simon Martin (2012, 23), the first component is a female agentive, the second has not been read, and the third means "nine-stone." Although we are not certain, the group may signify a name or a woman's title.

The Calakmul paintings are distinctive in that they include details not normally provided elsewhere. Classic period ceramics typically depict the final presentation of dishes without any of the intermediate activities (e.g., see vessel K1599 in the Kerr catalogs).⁴ In the murals on the pyramid, foods that have already been seasoned and cooked are also presented to people, but several scenes illustrate the underlying preparation, including the utensils used. The images and sometimes the texts indicate that many of these foods are based on corn (maize) in the form known as *waaj*, commonly represented as tamales and atole. The only seasoning referenced is salt (Martin 2012, 67–68; Valencia Rivera 2010).⁵

DISHES MADE FROM THE PRIMARY FOOD, CORN

Waaj (Corn Dough, Tamales, Tortillas)

In the panel on SE-S2 of the Pyramid of the Paintings (fig. 10.3a), a woman wearing a hat touches a vessel containing two waaj signs with one hand, and with the other she offers the man in front of her small bites of food from a

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Figure 10.2. A photo of the first and second levels of the southeast corner of Substructure I-4, Pyramid of the Paintings, Calakmul. From García Barrios and Carrasco Vargas 2008, 702, fig. 7a.

plate (fig. 10.3b). The artist shows that the man is enjoying one of these bites. This moment, at the precise instant when food is being consumed, is not often represented in Maya artistic creations. Consequently, the Calakmul depiction has greater naturalism. Because of the accompanying glyphic description, aj-waaj (person of tamales), Martin (2012, 67) suggests that the scene pertains to tamales. Sylviane Boucher and Lucía Quiñones (personal communication 2010) have commented that the small size and pinkish-brown color of the forms on the plate suggest that they could be polcanes, another type of food made with corn. However, other information supports the tamale interpretation. Iturriaga (in Alarcón 1999, 16) notes that in some markets in places like Michoacán, modern tamales can be very small. These are known as bolitas (little balls) and are not more than 4 or 5 cm in diameter. In the Huaxtec area, some corn tamales do not exceed the length of a thumb. However, such small tamales are rare today and have never have been found in other Maya images. If these are tamales, they would be the only such iconographic representation in the entire pictorial assembly of the Pyramid of the Paintings, although most of the foods there are made from corn. Their small size and dark color cause me to question whether these images really do represent tamales.

This doubt has led me to review the basis for the identification of the waaj icon. This glyphic sign was initially recognized as "corn tortilla" based on information in numerous dictionaries. Later, Karl Taube (1989) argued in an iconographic and epigraphic study that the waaj sign did not represent "tortilla," but different types of tamales (fig. 10.3c). One of the arguments that favors interpretation of the motif as "tamale" is the iconic similarity between the waaj sign and the tamal. Other authors have pointed out

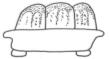


Figure 10.3. (a) (above) Corner SE-S2, Pyramid of the Paintings, Calakmul, showing a seated woman offering a plate with small food items to a man. Photo by Calakmul Archaeological Project, in García Barrios and Carrasco Vargas 2008, 702, fig.19. (b) (right) Detail, showing the food. Photo by Calakmul Archaeological Project, in García Barrios and Carrasco Vargas 2008, 702, fig.19. (c) Tamales represented on painted vessels. Redrawn from Taube 1989, 41, fig. 7a–e, by Miguel Moreno.









the lack of archaeological evidence for the comal (the round griddle made of ceramic on which tortillas were roasted), or a similar cooking device, until the end of the Late Classic or the Early Postclassic (Taube 1989, 33). This interpretation is accepted by most scholars.

The cultures of Central Mexican settlements, including Teotihuacán, knew the comal, as is shown by the ceramic figurines that carry them (López Pérez 2009, 96, 376, fig. 203h). It was probably Teotihuacán that introduced this cooking device to the Kaminaljuyú, Guatemala, area, where the remains of Early Classic comales have been found in archaeological contexts. These were associated with pottery bearing Teotihuacánstyle designs in which figures carry piles of flat food that could be stacked tortillas (fig. 10.4a) (Taube 1989:34). In this context, Taube also argues that *waaj* can have the broader meaning of "meal" or "food."

From the perspective of this extended meaning, one must consider the view suggested by Sophie Coe ([1994] 2004, 211), which is that the dictionary definitions can be seen as clarifications. In them, the tortilla is described as

a rather thick, round cake that is toasted on or under the embers or ashes of the hearth fire. According to Coe, some chroniclers, whom she does not specify, described how this bread was cleaned and offered to guests as soon as it was removed from the coals, as is still done in some communities in the Highlands. When speaking of the Guatemalan Chort'i, Charles Wisdom (1961, 113) says the tortilla is toasted on an open fire or in hot ashes, without using containers. That would explain the absence of comals in the archaeological context. One possible explanation for the round shape of the waaj icon is that it refers to the form of modern corn tortillas, as is defined by the vast majority of dictionaries.

Thus we return to the question of what the waaj icon represents. I have considered many sources, not only mural paintings, but also images on ceramics and in codices. I have analyzed texts as well and have come to the conclusion that the symbol may have a wider iconographic meaning. The current significance of the term waaj in Maya groups in Northern Yucatán, who use it to refer to the dough for tortillas, tamales, and so forth, is

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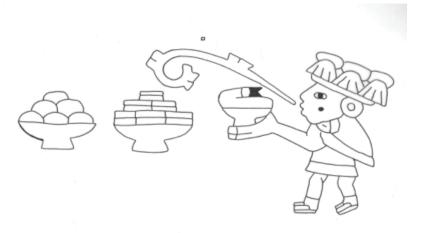




Figure 10.4. (a) (*left*) A Teotihuacán-style pot with tamales, tortillas, and a haunch of venison. Redrawn from Taube 1989, 34, fig. 2b, by Miguel Moreno. (b) (*right*) A plate (K1272) showing a woman kneading maize dough, possibly preparing flat tortillas like those shown in (a). From Kerr catalog, http://research.famsi.org/kerrportfolio.html, used by permission of Justin Kerr.

also pertinent. I review some of the cases here and show that the waaj symbol signifies more than tamales, including the corn dough and possibly also tortillas.

At least one example on a painted Classic period Maya plate from Lubantun (fig. 10.4b) shows a woman kneading corn dough on a metate. Beside her, a man who is smoking squats near a container that holds what could be a tortilla. The item is represented in profile and is flat, like a tortilla or pancake. Like the mass that the woman is kneading, the possible tortilla is outlined in black, which differentiates it from the neck of the vessel below. The writing on the plate only consists of pseudoglyphs, but, as Erik Velásquez García (personal communication 2010) notes, these glyphlike forms were made intentionally. The artist who created them clearly tried to mimic the running wa syllabogram prefix (left), which normally is the phonetic complement of wa-WAJ, or builds part of the sequence wa-ji.⁷ The outline of the largest element of both cartouches resembles a logogram WAJ, and the spiral interior resembles the hook syllabogram ji. So whatever it is that the scribe painted, an attempt was nevertheless made to suggest the word waaj. In this case, the pseudoglyphs clearly allude to the maize dough that the woman kneads or possibly to its transformation into the tortillas that appear in the container next to the man. In this context, Thomas Gann (1929) described a series of figurines from Lubantun that include a woman carrying a plate with what the author defines as "cakes." I believe that rather than cakes, they are the thick tortillas mentioned by Coe and Wisdom, which are still cooked in the Highlands.8

Also interesting is the supernatural narrative described on vessel K530 (fig. 10.5). Here we see the quadruple aspects of Chaahk and the Old God.9 Chaahk directs the ceremony from inside a cave. At the foot of the rain god is a tall cylindrical container for drinking cocoa (Stuart 2005, 126; Martin 2006). Four old gods, two of whom have net headdresses, face him, listening to his words. Four accompanying women serve foods made with maize (García Barrios 2009, 233-34). In front of the first of the old gods are vessels containing maize, as indicated by the waaj sign. The scroll of smoke that emerges from one of these suggests that it is probably hot. The text next to the two figures is not entirely clear, but the Primary Standard Series painted along the rim of the vessel can be read as u WAJ-chi-li-ja-na and -ib-uk' IXIM, yuk uwaajil jana 'ib' ixi'm, "here is the picture of the ripe maize meal in a vessel for drinking [cocoa]" (A. Lacadena, personal communication 2009). The text leaves no doubt that the food represented here is made of ixi'm (mature maize), which, interestingly, is represented by the icon waaj.

In the Late Classic it is also common to find the waaj icon on painted capstones, for example, on Capstone 3 from Dzibilnocac in the Chenes Region, Campeche (Staines Cicero 2001, 396–97, 2009, 44–45). Here the god K'awiil sits in a lotus position on a large cushion made of jaguar skin. Immediately in front of his legs we recognize a vessel containing three waaj signs, and in front of him is a basket filled with fresh maize. The scene is noteworthy because it shows two aspects of the preparation of maize: the grains and raw waaj dough that was obtained after crushing, grinding, and kneading. On Capstone 1 from



Figure 10.5. Vessel K530, featuring a supernatural appearance by Chaahk and four Old Gods, who are accompanied by women. Also shown are foods made of corn, specified by the text, "Here is the picture of the maize food on a container for drinking [cocoa]." From Kerr catalog, http://research.famsi.org/kerrportfolio.html, used by permission of Justin Kerr.

Dzibilnocac, we find the text *b'olon waaj* (countless waaj), which would allude to the abundance of maize food.

Additionally, it is common to find the icon waaj in the form of a ball on Classic period painted vessels showing scenes of palaces and tribute. They illustrate the same elements that appear in the murals in Calakmul, especially loads of blankets, cloths, cups, and food. On vessel K1775, we see two large plates loaded with three waaj at the feet of the ruler who is seated on a bench. In this case, as on many other vessels that reproduce this pattern, no text clarifies what type of food is mentioned. Perhaps this is simply a formula that expresses a concept similar to "abundance of food" on the capstone.¹⁰

It is also common to find gods holding the waaj sign in the Postclassic codices. They can be seen planting and cultivating it, as shown on page 28b of *Codex Madrid*. Chaahk uses a planting stick and sprinkles seeds indicated by the icon waaj and confirmed by the sign "tender maize." This is another example in which the sign does not function precisely as *waaj* in the sense of "tamale," but rather emphasizes and clarifies the action performed by Chaahk: planting corn as a food.

Diego de Landa described at least seven maize-based foods and drinks in his *Relación de las cosas de Yucatán* (Rivera Dorado 1992, 74). He comments, "The principal sustenance is corn, from which they make various foods and beverages." He describes how the women soaked the maize grains with lime the night before, so that it was soft

and half cooked by the next day. Then, after removing the husk from the grains, they ground the maize. The half-ground dough was made into balls that were given to workers, travelers, and merchants, because they could be consumed for several months. The chronicler adds that various drinks and hot and cold dishes could be made with maize dough, as well as "many kinds of bread" (Landa in Rivera Dorado 1992, 75). It is understood that when Landa refers to the variety of breads, he means those made from corn dough. He might even have seen some of the examples associated with the pre-Hispanic waaj icon. The dough can be cooked in a variety of ways to make different breads and drinks, and today the Yucatec Maya still use the term waaj for the substance used to produce all types of foods made with corn: tamales, tortillas, and so forth.¹²

All these examples, in addition to providing an overview of the variety of food items that can be made from corn, show its previous and current importance in the daily life of the Maya. Therefore, the pre-Hispanic artists likely used the waaj symbol with a wider meaning. Scholars believe that besides representing specific foods made from corn, like tamales, the motif refers to uncooked corn dough that has been formed into balls. The dough was then made into tamales or tortillas and cooked. In his studies of the Chort'i of Guatemala, Wisdom (1961, 114–16) commented that maize is consumed three times a day, every day of the year, and that it forms a basis for a variety of other kinds of foods,

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Figure 10.6. Corner NE-N1, Pyramid of the Paintings, Calakmul: a man and a woman with corn dough that is filled with a red substance, possibly achiote. Photo by Gene Ware, in García Barrios and Carrasco Vargas 2008, 700.

including cocoa and coffee drinks (see also Taube 1989, 33, 42, 44–45).

Considering these facts, I think that the waaj icon can represent corn dough in the first phase of preparation, which is to say, ground, kneaded, and made into balls for various uses, such as posole, atole, and tamales. The symbol may also refer to tortillas and other foods made with corn. Furthermore, as is shown in the Postclassic codices, the sign is used in contexts pertaining to maize, but without referring directly to the foods made with it. It can also be used to express the simple concept of "an abundance of food," as is written on painted capstones. All this leads me to believe that the small pieces of food in the SE-S2 scene on the Pyramid of the Paintings do not represent tamales, but one of the many foods made from maize dough that were identified using the waaj sign.

Kujmaal

It is possible that one of the aforementioned breads discussed by Landa is shown in the corner scene NE-N1 of the Pyramid of the Paintings and that it may have been known at Calakmul as *kujmaal* (fig. 10.6). ¹³ The man and woman in the panel sit beside a shallow bowl that contains a large ball of maize dough that has a colored area at the top to indicate a red interior. The man holds a small piece that has been cut from the ball in his hands. The woman offers him a bowl of bite-sized items that are possibly also from the ball of dough. Behind her is a large

basket that supports two bowls like the one being held (see García Barrios and Carrasco Vargas 2008; Carrasco Vargas and Cordeiro Baqueiro 2012).

The large ball of bread with the red marking may be similar to what was described by Captain Grijalva after he enjoyed a meal that was served to him in Campeche: "Once the mass was finished they brought certain well made baskets, one with *pasticci* [filled pies] of maize dough stuffed with chopped meat. . . . They . . . praised that dish pasticci, which tasted as if it were spiced. It was reddish inside, with a good quantity of that pepper of the Indies which is called *asci*, the Antillean term for chile" (Fernández de Oviedo, cited by Coe [1994] 2004, 129). And, "once we ended up with the dough, [they] brought some very well crafted baskets, one with pasticci a pie filled with meat." Coe ([1994] 2004, 88) writes that the Spaniards praised the pasticci dish, saying that it tasted spicy. Its interior was red and had a lot of pepper from India called *axci* (chile).

We cannot know if chile was the spice that gave color to the food or if it was red because of achiote or other products that are used even today. Among the possible readings of the text offered by Martin (2012, 69), the best seems to be **K'UH j-mu-li**, *kujmar*, which in Chort'i Maya means "dough for tamales" (Lacadena, personal communication 2007). Similar terms have been found in the Yucatán, such as *k'u'um*, meaning "nixtamal," which is corn mixed with lime to remove the skins of the corn kernels before they are ground (Alarcón 1999, 20; Barrera Vásquez et al. 1980, 422). In this case, **K'UH-mu-li** could refer to **kuhmil** or



Figure 10.7. Corner NE-N2, Pyramid of the Paintings, Calakmul: three people holding bowls, including a standing man, a seated woman, and a child sitting on a bundle. From Martin 2012, 71, fig. 27, used by permission of Simon Martin.

kuhmaal. Interestingly, these terms are defined by the Chort'i as dough colored with achiote (Martin 2012, 69–70), which, notes Claudia Alarcón (1999, 22, 27), is widely used as an additive to nixtamal dough.

In the Calakmul example, it seems that the red dough indicates the food that the woman offers to the man, who tastes it. Another possibility is that the dish being offered accompanied the maize dough that was filled with achiote and chile (Alarcón 1999, 21). Maize was, and still is today, the principal food, comparable to wheat bread in Europe and rice in Asia, which leads us to assume that the items made from it were the main entrée. Once the nixtamal had been prepared, it could be used for tamales, tortillas, or atole (Alarcón 1999, 21). We can deduce this from the accounts of the first encounters between the Maya and the Spaniards, who mentioned that they were served from a large basket containing a variety of products made from corn, such as stuffed maize dough, corn bread, filled corn pie, and tortillas (Fernández de Oviedo, cited by Coe [1994] 2004, 188).

Ixiim (Corn)

On the corner NE-N2, three figures are painted (fig. 10.7). A man stands at the left, and a woman sits on a floor, facing him. Behind her is a child sitting on a high, tied bundle. Each of the seated figures holds a similar bowl. The man holds a larger container that, like the bowl of the woman, has a blue rim. The contents of the three

containers are invisible, although the text painted between the adults provides some clues. Martin (2012, 71–72) suggests that it reads **AJ i-xima** for *aj ixiim*, "maize-kernel person." The head of the Maize God has recently been read as a logograph, **IXIM**, and *ixiim* may refer to the grains of corn to be cooked (Martin 2012, 72). Among present-day Yucatec Maya, ixiim is mature corn and *nal* is tender corn (Bernando Polanco, Maxcanú, personal communication, 2011). The basket between the woman and the man indicates that the food it contains must be relatively solid and dry, perhaps a meal made with grains of corn. The *Relaciones histórico-geográficas de la gobernación de Yucatán* records,

The grain that they use to make bread in this land is that which they call maize, which in the language of these indians they call *yxim* [*ixi'im*], besides making bread they make a beverage that is called *atol*, and in the language of this land is called *za* [*sa*], that is in the manner of porridge and pouring [it] in a container from a fruit from a tree of this land, which is round and is called *luch* [*jicara*, translation by Ana García Barrios], and from this fruit, from cutting each of them in half, they obtain two containers and that serves them for drinking the porridge made here, and on top they sprinkle a little aji [chile, translation by Ana García Barrios] which in this language is called *yc* [*ik*]. (Paredes [1983] 2008, 89)¹⁵

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Wisdom (1961, 116) notes that the present-day Maya of Guatemala distinguish different types of corn, as we presume the pre-Hispanic inhabitants of Yucatán did. In the Highland region, people use yellow corn, hard and mature, during most of the year. In the spring, however, they use ears of very tender corn. The new corn is not mixed with lime and is more flavorful than mature corn. A reference to the ixiim form of corn appears on vessel K504, where a high-level dignitary sits on a bench at the left of the scene, holding a tall vessel. He faces two supernatural beings, the goddess of the moon (at the right) and a supernatural figure (Itzamná) who holds a vessel with waaj icons. From their hand gestures, it seems that the two men talk, exchanging knowledge about food. The central vertical text, though unclear, appears to say, "This is the vessel for . . . IXIM? b'a ko-la, ixiim kob'al," "seed corn or ears of corn," and probably refers to the content, some type of drink made with grains of mature corn like that shown in the vessel just behind the ruler. 17 More probably, on account of the inclusion of the tall, thin container, this granular corn was mixed with cocoa, as we usually find in classical references (Stuart 2005, 131-39; Martin 2006, 154-69). Perhaps this is also how it was used in the scene on NE-N2.

Previously, I referred to the text of the vessel K530 (see fig. 10.5), which contains the expression "uwaajil yuk'ib jana 'ixi'm" (here is the picture of the cornmeal in a container for the drink [cocoa]). The image shows Chaahk with a tall vessel, perhaps used for drinking the cocoa and ixiim "grains of corn" mixture that appears on vessel K504. This may be the same grain that was used to mix something solid with the cocoa in the scene on the Pyramid of the Paintings. Corn in granular form was also used to make atole. According to Coe ([1994] 2004, 200–201), this delicacy could be improved by the addition of corn grains, which provided something to chew.

Ul (Átole, a Maize Beverage)

The only drink that is clearly identifiable in the hieroglyphic texts of these paintings is, like the meals mentioned previously, made of maize. It appears in the form of *ul* (atole). The corner SE-S1 (fig. 10.8a) shows four people: two men sitting at the edges and two women in the center holding a large vessel. The scene focuses on the main figures, the woman in a translucent blue huipil (García Barrios and Carrasco Vargas 2008; García Barrios and Vázquez López 2011; Martin 2012, 63–64) and the man at the left who touches a ball of corn. This is an extraordinary scene in the panorama of Maya wall painting because we know of no other instance in which a man participates directly in the preparation of dough. At the other side of the scene, another man appears to drink from the bowl in his hands (Boucher and Quiñones 2007, 39). However, close examination of the image shows that the bowl is behind his mouth (García Barrios and Carrasco Vargas 2008, 693).

It is likely that the container holds the substance mentioned in the text located above the man, **AJ u-lu**, *aj ul*, "atole person" (fig. 10.8b; Martin 2012, 63). Diego de Landa says that the atole was made with more finely ground corn (Rivera 1992, 74; Coe [1994] 2004, 200), perhaps ground three times, from which a kind of milk was extracted. Among the present-day Maya, in both the Highlands and the Lowlands, atole is fine dough mixed with water and spices and is thick, as *poleada* (M. Grube 2001, 83). This atole was drunk hot in the morning.

Coe ([1994], 2004, 204) comments that one of the drinks not mentioned by Landa, probably because it was used in rituals, is sakul (white atole). It is made of unroasted, tender white corn, which gives it its name. This word, sakul, can be read in the glyphs of Classic period vessels; it is a kind of atole that was placed in the graves of the dead. Its funerary use would explain why vessels for this kind of drink are less common than those for cocoa. Stuart (2005, 142) observes that the ul glyph does not appear on tall, cylindrical vessels, forms that were reserved for cocoa. Nor does it appear on vessels decorated with elaborate iconography, as the cocoa vases often were. The pottery form that is associated with the sakul beverage is globular, helpful for keeping the drink cool. It is precisely this type of vessel that appears in the scene on the following corner SE-E1, which shows three persons arranged in a composition that mirrors the one discussed earlier (fig. 10.9a). In the center, a seated man drinks from a container with blue stucco on its exterior.¹⁹ On the sides, flanking the central figure, two women with dippers attend to the contents of the vessels next to them (García Barrios and Carrasco Vargas 2008, 693; Martin 2012, 64).

The Classic period has given us many scenes of courtly life that also show food. However, as I have described, very few images portray persons actually consuming the food. According to Christian Prager (2002), certain members of the court had the responsibility of tasting the meals that would be served to the *ajaw* (lord). On vase K1453 (fig.10.9b) a dwarf-priest tests



Figure 10.8. Corner SE-S1, Pyramid of the Paintings, Calakmul: (a) (above) Two men and two women shown with vessels and maize dough. Photo by Gene Ware, for the Calakmul Archaeological Project, in García Barrios and Carrasco Vargas 2008, 700, fig. 4. (b) (right) Detail of the glyphs in the upper right corner, which mention aj ul, "person of atole." From Martin 2012, 63, fig.4, used by permission of Simon Martin.



the drink in a bowl.²⁰ This scene differs from the representations of eating on this and other sections of the Pyramid of the Paintings, which do not include such official tasters.

Returning to the scene of the SE-E1 corner, we see at the left of the man who tastes the drink a text that repeats the expression AJ u-lu, "atole person" (Martin 2012, 64). On the rim of the blue stuccoed vase a very small graffito says, yu-li, yul, "his atole" (Martin 2012, 65). Unquestionably, the contents of the two large pots and the blue vase are atole, or ul. Boucher and Quiñones (2007, 41) suggest that the small horizontal lines on the sides of the liquid being poured from the dipper indicate that it may be hot. Based on its red-violet color, the authors further propose that the substance could be a kind of atole called pinole (made of roasted corn powder and Tabasco pepper) that was served hot during cold

weather (Boucher and Quiñones 2007, 41).²¹ According to Tzetzal women, that type of atole can be made from black corn.

Coe ([1994] 2004, 200–201) describes a special cooking technique that is used for atole, following the grinding of the corn and the addition of the water. Atole can also be made with tender corn, which does not need the treatment with lime to remove the husks from the grains. The maize is sufficiently cooked when a drop placed in cold water does not dissolve. This form of atole can only be drunk during one season of the year: the moment when the crops are harvested. It is often consumed from special vessels or served as an offering to the gods.

Landa mentions that three meals a day were made of beverages prepared from nixtamal corn, which the Maya drank warm or cool in the morning, "adding a little pepper of the Indies [ground chile] or cocoa" (Rivera 1992, 75; 182 García Barrios





Figure 10.9. (a) (top) Two women stir atole, while the man in the center drinks from a vessel covered with blue stucco, Corner SE-E1, Pyramid of the Paintings, Calakmul. Photo by Calakmul Archaeological Project, in García Barrios and Vázquez López 2012, 100, fig. 7. (b) (bottom) Vessel K1453, with dwarf-priest who tastes the food of the ajaw. From Kerr catalog, http://research.famsi.org/kerrportfolio.html, used by permission of Justin Kerr.

Coe [1994] 2004, 196). ²² Gaspar Antonio Xiu (in Coe [1994] 2004, 196) offers a similar pattern: two liquid meals and one solid. According to the 1581 record of customs in Kizil and Stilpech, Yucatán, that was compiled by Juan de Paredes ([1983] 2008, 198), atole was drunk in the morning: the "kind of drink that those in the interior make from maize dough, like porridge, which is a very healthful beverage." ²³

The relevance of the four scenes discussed so far is that all the foods are made with corn—waaj (tamale, tortilla), kujmaal (corn), ixiim, (corn), and ul (atole)—and I suspect that some images illustrate it as part of the

development of other food items. For example, the grain could be mixed with cocoa.

OTHER FOODS

Cocoa

The scene on corner ESE-LtS2 (fig. 10.10; on the second level, on the side of the stairway) shows a seated woman who wears a blue huipil and a hat with a high crown.²⁴ She holds a cylindrical vase in her hand, which is tall and



Figure 10.10. Corner ESE-LtS2 (upper-right corner of fig. 10.1), Pyramid of the Paintings, Calakmul: a seated woman holds a tall, thin vessel of the type used for drinking cacao. Drawing from Martin 2012, 67, fig. 16, used by permission of Simon Martin.

decorated, like those on top of the large basket in front of her. The text that accompanies this scene has been read by Martin (2012, 67) as **AJ-ja-yi j**, *jaay*, "clay vessel person." Stuart (2005, 125–26) suggests that tall, thin vessels were described as *uk'ib* (drinking vase) or jaay (container) and that most were intended for cocoa. As far as we know, no hieroglyphic text refers to cocoa among all the images on the Pyramid of the Paintings, despite the fact that it was one of the most common beverages in Maya society, and these vessels may be an indirect reference to the consumption of the drink.

Atz'aam (Salt)

In the scene on the corner NE-E1 (fig. 10.11), a man with a hat resembling a bowler holds a utensil that he is using on the contents of the basket. Facing him, a woman holds a green plantlike object in her hands. The text written between two figures says, **AJ-a-tz'a-mi**, *aj atz'aam*, "salt person" (Fig. 10.11b; Martin 2012, 68). Martin writes that this is the first known pre-Hispanic reference to salt, an essential part of the diet of any people. The source for the Calakmul supply was probably trade with the people of northern Yucatán or the east coast of the Atlantic.

Historical records include this product among the tribute goods paid to the lords (Valencia Rivera 2010).

The text identifies salt as the item in the tall basket next to the man. It is more difficult to explain the green object, possibly some kind of plant, that the voluptuous lady holds. Or, perhaps it is something wrapped in plant leaves. Maya groups still commonly wrap food in leaves for preservation and cooking, including banana, avocado, and chaya leaves (Coe [1994] 2004, 214; Valencia Rivera 2010). Boucher and Quiñones (2007, 47) suggest that the object may be dough mixed from pumpkin seeds and chaya, which is still used in traditional cooking. If we consider the reference to salt in the text, the green item could be some type of food, meat, or fish preserved in salt. This practice was common among the Maya, as described by Landa (Rivera 1992, 74, 78; Coe [1994] 2004, 228). The hieroglyphs in other scenes on the Pyramid of the Paintings refer to the main foods shown, and, in this case, the text is clear. The motif carried by the woman must be something that was prepared, preserved, or seasoned with salt, or perhaps it is the packaged salt itself.25 The same approach might have been followed during pre-Hispanic times (Valencia Rivera 2010). Such packages of salt were used as standardized measures in the regional

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Figure 10.11. Corner NE-E1, Pyramid of the Paintings, Calakmul: (a) (top) A seated man with a utensil for dipping the contents of the basket; opposite him, a woman holds a green vegetable-like object. Photo by Ana García Barrios, for the Calakmul Archaeological Project, in García Barrios and Carrasco Vargas 2008, 702, fig. 7. (b) (bottom) Text detail from center, "person of salt." From Martin 2012, 68, fig. 19, used by permission of Simon Martin.

markets in the highlands of Guatemala at the end of the nineteenth century for goods like copal incense, so it seems reasonable to think that the green object in the Calakmul painting is also the salt written about in the accompanying hieroglyphs, packaged and prepared for exchange or sale. During the colonial period, it was customary in the salt marshes of northern Yucatán to sell salt "enbenequenaba," or wrapped in henequen leaves.²⁶

Salt was traded in two separate spheres, one in the north and one in the south (Andrews 1997, 45). Calakmul, Tabasco, Chiapas, and the Guatemalan Petén were within trade routes radiating from the salt marshes of northern Yucatán. Anthony Andrews (1997, 42) argues that population growth in the Lowlands during the Classic period resulted in a high demand for salt. This enabled the salt of the north to compete with other sources that had begun to appear along the coast of Belize, from which evaporated salt was exported.²⁷ It has been demonstrated archaeologically that the

salt production activities in Belize ceased around AD 900–1000. ²⁸

CONTAINERS AND UTENSILS

The paintings show various types of vessels, many of which are large. These include containers made of clay—pots, big plates, pitchers, cups, and bowls—as well as basketry, shown as baskets and as supports for ceramics (Boucher and Quiñones 2007). Clay vessels were common tableware, with the exception of specialized forms for drinking: the tall, thin-walled high cylinders for cocoa and those stuccoed in blue for atole. At the same time, the absence of basic tools for the preparation of the corn dough, such as the mano and metate, is notable.²⁹ Griddles for cooking are also missing.

All this suggests that the food depicted has previously been prepared or is almost ready to eat. However,



Figure 10.12. Detail, Corner SW-S2, Pyramid of the Paintings, Calakmul: a woman with decorated sticks. Photo by Calakmul Archaeological Project, in García Barrios and Carrasco Vargas 2008, 701, fig. 6.

it is possible to recognize utensils for the handling of some of these products. For example, we see a large spoon for preparing atole and nixtamal in the SE-E1 scene (see fig. 10.9a), near the arm of the figure who drinks from the blue container (Boucher and Quiñones 2007, 41). A similar utensil is held by the woman who closes the scene on the right side. Above her is written a text that seems to name her as the owner of this structure (Martin 2012, 79–80).

People used large spoons for seasonings like salt, as is evidently shown in figure 10.11a. If the green bundle held by the woman on the left represents a quantity of salt, the implement shown above the basket could be a measuring device.³⁰ Also intriguing are the long punches, sticks, or needles with carved faces of gods, such as K'awiil, at the ends that we see in the two large vessels in the SO-S1 scene (fig. 10.12; Martin 2012, 76–77). These objects have been interpreted as sacrificial utensils or pins to ornament clothing. Nevertheless, it is striking that they appear in a context where food and especially men figure so prominently, which leads me to propose that these may be utensils for eating a specific

food, even though the Maya custom was and continues to be to use the hands for eating, as shown in the corner SE-S2 (see fig. 10.3a and b). Moreover, the sticks are shown with containers for serving food, so perhaps they were needed to puncture something (García Barrios and Carrasco Vargas 2008, 692). This image helps explain the many uses that the punches, needles, or sticks that have hitherto been regarded only as instruments for self-sacrifice or weaving may have had.

CONCLUSIONS

A large percentage of the scenes depicted on the Pyramid of the Paintings of the Chiik Nahb' acropolis at Calakmul illustrate foods in the form of solid meals and beverages. In most cases, it is clear that women are responsible for handling these items and offering them to men, who wear headdresses made of netting. These elite men consume the food, an action that is otherwise unknown in the corpus of Maya art. On Classic period polychrome vessels and in the San Bartolo murals (Saturno, Taube, and

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Stuart 2005), food is represented around the kings or the gods, but only the court dwarfs are portrayed as food testers. For the first time, food plays a main role in scenes where it is described in texts and shown being eaten by high-level people.

Previous studies of these paintings have focused on different themes, such as the texts and types of vessels. This has led to other interpretations of the scenes, in which people not only appear with food, but also with bundles, baskets, decorated blankets, and vessels, which might suggest trade or commerce (García Barrios and Carrasco Vargas 2008; Boucher and Quiñones 2007; Carrasco Vargas, Vázquez López, and Martin 2009; Martin 2012, 80). Although I do not exclude this interpretation, the location of the Pyramid of the Paintings in Chiik Nahb', in a space that was important to political events of the time, raises doubts about whether it was merely a simple market. The area would seem more appropriate for royal tribute than mundane commerce, as is also consistent with the inclusion of the various goods.

It is also interesting that all the meals are made from maize and do not show birds, fish, or mammals, such as the white-tailed deer, that were typically consumed by rulers. Nevertheless, the different costumes of women—including hats with tall crowns, translucent huipils embroidered with glyph-like forms or geometric designs, and low-cut dresses or much simpler "faldellín" styles—suggest social classes. Also, most headdresses worn by men signify their importance and category (García Barrios and Carrasco Vargas 2008, 691–92). These accoutrements are made of net, which is generally associated with scribes and priests, and are typical of God N.

The artists of the Calakmul paintings especially delighted in the small sizes of the foods shown on corners NE-N1 (see fig. 10.6) and SE-S2 (see fig. 10.3). This suggests hours dedicated to the preparation of the dishes. We note that the longest text written in these paintings, located on the corner SE-S1 (see fig. 10.8), includes a sign (in the last position) that can be interpreted, although with certain reservations, as *itz'aat*, "wise man, artist." This supports the idea that wise and elite people were tasting foods offered to them.³¹

I would add that the term *lukban* can mean "banquet," which indicates that the gloss may refer to the overall pictorial narrative of the pyramid, *lukban itzaati*, "the banquet of itzaat [wise]" (A. Lacadena, personal communication 2007). This gloss is in agreement with the images that accompany the text, in which persons of high rank

taste food and drinks. The scene on vessel K530, in which old gods with net headdresses are served food by women, is reminiscent of the images on the Pyramid of the Paintings.³² The tradition continues in current ceremonies and festivals, where the expert hands of the women prepare food made of corn. The Calakmul paintings additionally show some form of commercial exchange, such as trade, or perhaps the payment of tribute. The concept that links these commodities is that they are all Classic period tribute goods, as seen in other painted vase scenes. Vessel K1790, which shows the delivery of tribute, suggests that this could also be the underlying theme of the Calakmul images, which would be in agreement with the Mesoamerican practice of combining a reception in which food is served with the payment of tribute or commerce.

In conclusion, the ultimate intention of the Calakmul images may be the same as that transmitted by the expression *oox wi'(il)* (abundance of food), which is recorded on some painted capstones. This expression relates to the Maya notion of well-being and reflected the perpetual scarcity of food and drink—a concern would explain the large number of Late Classic period images of food that appear in works created for the ruling class.

NOTES

- The Mexica included the groups that inhabited the Valley
 of Mexico upon the arrival of the Spaniards. They occupied this territory from the middle of the thirteenth century, having arrived from the north of Mexico or the
 southwestern part of the United States.
- 2. In modern Mayan languages, this word functions as a male agentive, but in the Classic period it was used to identify both male and female characters (Martin 2012, 62).
- Other agents are recorded as "person of snuff," "person of salt," "person of corn," and "person of tamale" (Martin 2012).
- 4. All roll-out vessels mentioned in this paper are from catalogs by Justin Kerr (1989, 1990, 1992, 1995, 1997, 2000), which were published between 1989 and 2000 and have been posted on the internet at www.mayavase.com.
- 5. Other important substances, such as tobacco, are mentioned in the texts (Martin 2012, 67–68; García Barrios and Carrasco Vargas 2008, 691), but are not treated in this discussion of food.
- 6. Chontal *waj*: tortilla, pan (bread) (Keller and Luciano 1997, 276), *waj*: tortilla (Pérez González and La Cruz 1998, 77); Cholan *waj*: tortilla (Aulie and Aulie 1978, 127), *bobo*

waj: tamal de elote (corn tamal) (Schumann 1973, 77), waj: tortilla (Schumann 1973, 98); colonial Yucatec wuah: tortillas de pan de maíz, de esta tierra (tortillas made of cornbread, from this land) (Arzápalo Marín 1995, 744), u wah ixi'm: tortilla de maíz, pan de maíz (tortilla made of corn, bread made of corn) (Barrera Vásquez et al. 1980, 905); modern Yucatec wáah: tortilla, bread, tortilla made from green corn, rain down (Bricker, Po'ot Yah, Dzul de Po'ot 1998, 298), waaj: tortilla de maíz, pan en general (tortilla made of corn, bread in general) (Bastarrachea, Yah Pech, Briceño Chel 1992, 129); Itza waj: tortilla (Hofling and Tesucún 1997, 655); Mopan waj: tortilla (Schumann 1997, 284).

- In this study logograms are shown in bold capital letters and syllables in bold lowercase letters, following the rules of transcription published by Lacadena García–Gallo and Wichmaan (2004).
- 8. Products made from maize have been recognized in the iconography of the Maya area from very early sources. In the Preclassic paintings at San Bartolo, among the figures on the north wall is a young woman who kneels with arms outstretched as she makes an offering to the maize god. This is a vessel filled with maize balls, perhaps represented as dough. Or they may be tamales that have not been wrapped in leaves (Saturno, Taube, and Stuart 2005).
- 9. The Old God with a net headdress is commonly known as the God N, although as noted by Martin (2007), most likely it is an invocation of Itzamná. Paxton (2001) also proposes that in the Venus table of the *Dresden Codex*, God N is closely related to the sun.
- 10. Even now maize dough is called *textli* in the Nahuatl language, which corresponds to the measure for making a tortilla and, as noted by Novo (2006, 39), the dough, along with tender or mature corn, and beverages made with maize. Today, there are still three essential ways to use corn.
- 11. The original text of Landa's statement says, "El mantenimiento principal es el maíz, del cual hacen diversos alimentos y bebidas."
- 12. Information from Bernando Polanco, collected in March 2012 in the village of Maxcanu, Yucatán.
- 13. There is no direct translation for this word.
- 14. The original text says, "Una vez que terminamos con la masa, trajeron ciertos cestos de muy buena factura, uno de ellos con *pasticci* una empanada rellena de carne."
- 15. The original text says, "El grano con que hacen pan en esta tierra es el que llaman maíz, que en lengua de estos indios llaman yxim [ixi'im], además de hacerse pan se hace un brebaje que se llama atol, y en lengua de esta tierra se llama za [sa], que es a manera de poleadas y echando en un vaso de una fruta que echa un árbol en esta tierra, redondo, que se llama luch (jícara), y de esta fruta de cada una de ellas cortada por medio sacan dos vasos y esto les sirve de beber con ellas aquí hechas

- poledas y encima le echan un poco de *ají* (chile) que en esta lengua se llama *yc* [*ik*]."
- This reading is by Alfonso Lacadena (personal communication 2013).
- 17. YUCATEC MODERN ixim: maize, maize in general. The name as such is usually applied to the grains already separated from the ear. The original dictionary text says, "El nombre como tal, suele aplicarse al grano ya separado de la mazorca" (Barrera Vásquez et al. 1980, 275). In the Cordemex dictionary just cited, the entry kob is translated to Spanish as "maíz dañado o perdido o corrompido, que se mojó en la caña, o maíz añublado," kobil ixi'm, u kobil nal, "maíz o mazorcas de maíz así" (Barrera Vázquez et al. 1980, 324). The English translation of the kob definition is "damaged or ruined or spoiled maize, which became wet on the stalk, or withered maize," kobil ixi'm, u kobil nal, "such maize or ears of corn." (Barrera Vásquez et al. 1980, 324).
- 18. Atole derives from the Nahuatl word atolli, a term used by the Spanish to define the Maya drink ul (see Coe [1994] 2004, 181). According to Kaufman and Justeson (2003, 185), the term ul is employed by a large number of Maya groups. Colonial Yucatec uul: atole; Chol ul: atole; Tzeltal ul: atole; Tzutuhil ulul: atol; Tojolabal ulul: atole; Chuj ulul: atole; modern Yucatec ul: atole dulce hecho de maíz nuevo y fresco y puches o gachas (sweet atole made of fresh new maize and porridge or gruel).
- 19. Stuccoed vessels are very common in burials from this period at Calakmul (Boucher and Quiñones 2007, 41).
- 20. We know that the dwarf who tests the drink in the bowl is a priest because his headdress is white and round and includes a book and brush.
- 21. According to the chroniclers, pinole, toasted corn powder, was usually employed by travelers. It could be eaten plain or mixed with water as atole (Coe [1994] 2004, 202).
- The original text says, "echándole un poco de pimienta de Indias o cacao" (chile molido).
- 23. The original text says, "género de bebida que los de la tierra adentro hacen de masa de maíz, como poleadas, que es un brebaje muy sano."
- 24. Almost all the hats worn by the women on the SE corner have crowns decorated with designs similar to those reproduced in the Chimbote polychrome pottery type (see Boucher and Quiñones 2007, 45).
- 25. Another possible but less likely substance is sugar. Even today the Chorti Maya wrap this substance in banana leaves for storage. Although the description by Wisdom (1961, 141–42) does not discuss how salt was stored, we expect this would have been similar. In some Polynesian islands salt is wrapped in vegetable leaves for transport and marketing (Nuria Morère, personal communication 2008).
- Undated document, contaduría 911, Archivo General de Indias. Seville.

- 27. For its preparation, seawater was first filtered, and the resulting brine was boiled in clay pots until the water evaporated, leaving salt (Andrews 1997, 42).
- 28. In the opinion of Andrews (1983, 20), in some parts of the Maya area that were far from the coast and had no local sources of salt, the substance could be obtained from the leaves of certain plants. Another possibility is that the green element held by the woman in the Calakmul painting is palm leaves, *guano* and *botán*. When these leaves were burned, salt could be made from their ashes. However, since Calakmul in known to have participated in the salt trade, it seems more likely that the motif represents the wrapped product or a food made with it.
- 29. A metate is a flat, rectangular stone surface with three legs that served for grinding grains and seeds. Its companion implement, the mano, was a simple stone cylinder.
- 30. This would be consistent with the comments of Wisdom (1961, 55), who states that in the early twentieth century it was common among the Chort'i to use containers made from gourds to measure amounts equivalent to a weight.
- 31. For Martin (personal communication 2008), the Itz'aat term for "wise, artist" is not consistent with the rest of the text, which he reads as **lu k'u ba-na**, *luk'ban*, "remove the burden," a reference to the action of removing the heavy pot carried by the woman in the blue dress.
- 32. In the Late Classic vessels it is quite common to find scribes and priests associated with food that is not consumed, that in some instances is eaten by dwarf priests (see K1453, K1599, K1775, K3035, K504, and K1790). The vessel K1760 depicts a similar scene but includes only men, and the setting is a pyramid. The protagonist is a king who receives food and other tribute items, such as blankets.

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Chapter Eleven

Mesoamerican World View and Cosmology in the Murals of Mayapán

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esoamerican cosmology and related religious beliefs are encoded in murals discovered at Mayapán, the last Maya capital of Yucatán. The stylistic affiliations of the murals found in three structures (Q80, Q95, Q161) are somewhat different, but all date relatively late in Mayapán's history, between AD 1350/1400 and 1450, based on their association with later buildings at the site (figs. 11.1-11.5; Milbrath and Peraza Lope 2003, table 1). The subject of this chapter is the transformations in the iconographic programs seen in these murals over time. They are all found on structures that are considered atypical in the corpus of architecture at Mayapán.1 And the paintings exhibit different sources of inspiration during different periods, as discussed in the sections to follow. Tatiana Proskouriakoff (1962, 105, 109) noted that both Structures Q80 and Q95 are unusual buildings, describing Q80 as a unique temple and Q95 as a temple that includes benches, a feature usually associated with oratories. Also, Q161 is attached like a wing to the main pyramid at Mayapán rather than being the more typical free-standing colonnaded halls (fig. 11.2).

It is possible to distinguish two or three different periods of mural painting. The Temple of the Fisherman (Q95), probably the earliest mural of the three under consideration here, resembles murals found in Quintana Roo, along the east coast of the Yucatán Peninsula (figs. 11.5 and 11.6). This mural shares some elements with the broader Mixteca-Puebla tradition, but it pertains to the

"International Style," or more specifically the East Coast International Style (Miller 1982, 71; Robertson 1970). This mural's East Coast stylistic affinities might suggest that the art of mural painting was introduced from the site of Tulum, Quintana Roo, which had an active trading relationship with Mayapán and shared similar ceramics but was first occupied earlier, ca. AD 1000 (Milbrath and Peraza Lope 2003, 5, 27–28).

Another mural, in the Temple of the Five Niches (Q80), seems more closely linked with the fully developed Mixteca-Puebla style, especially the traditions seen in the Puebla-Tlaxcala area and Oaxaca (see fig. 11.4). This mural, tentatively dated later than the Temple of the Fisherman mural (Q95), displays imagery of Quetzalcoatl like that seen in Cholula and other Central Mexican sites (McCafferty 1996, fig. 16f). Its Mixteca-Puebla traits probably came through routes to the west linked with Puebla and Oaxaca, either overland along routes later used by the Aztecs through Xicalanco or more directly across the gulf from Tabasco or Veracruz (Milbrath and Peraza Lope 2003, 29-31). Trade with Oaxaca is evident in imported goods at Mayapán, but Mixteca-Puebla ceramics were not imported from Oaxaca or the Puebla-Tlaxcala area. However, the absence of trade ceramics does not rule out contact with the Mixteca-Puebla symbol system.

The Hall of Solar Symbols (Q161), the latest mural of the three discussed here, shows stylistic links with Aztec

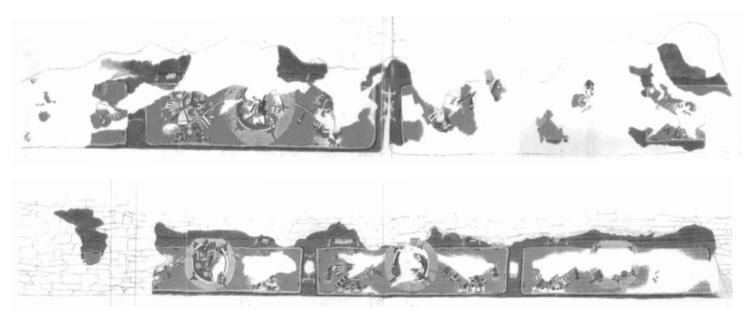


Figure 11.1. Murals, Hall of Solar Symbols (Structure Q161): eight panels on the north and south sides. Barrera Rubio and Peraza Lope 2001, plates 16 and 17. Courtesy of the Instituto Nacional de Antropología e Historia.

murals, or more specifically the Mexica murals from the Templo Mayor, which would indicate more specific contact with the capital city of the Mexica at Tenochtitlán in the Valley of Mexico (see figs. 11.1 and 11.2, fig. 11.7). The Mexica, who shared an Aztec heritage with other Nahuatl-speaking populations in the valley, had developed an artistic style that can be readily distinguished from the Mixteca-Puebla style found more broadly distributed in the Mixtecspeaking area of highland Oaxaca and to the east among the Nahuatl-speaking populations in the Puebla-Tlaxcala Valley. Instead of the dense color cells bordered by black, a characteristic of the East Coast International Style and the more widespread Mixteca-Puebla style, the Mayapán murals completely lack black outlines and are closer to the format of the Templo Mayor Phase II murals. The striding figures shown in profile also have proportions similar to those of the Phase II murals in the Templo Mayor (fig. 11.7; Milbrath and Peraza Lope 2003, 30). Furthermore, the fire serpent "standards" held by the figures in the Mayapán murals recall themes in Aztec art (Milbrath, Peraza Lope, and Delgado Kú 2010). The Q161 mural is dated around 1400-1450, based on our architectural chronology, and may relate to the influx of "Mexicans" (Canuls) at Mayapán late in the site's history (Milbrath and Peraza Lope 2003, 26-31, 35, table 1).

Before discussing the Mayapán murals in detail, a brief summary of our interpretations will provide an overview of the themes. The Temple of the Fisherman mural (Q95) seems related to Maya cosmology and calendar rituals but also has iconographic elements seen in the murals of the East Coast International Style (see figs. 11.5, 11.6; Milbrath and Peraza Lope 2003, 27-8; Milbrath, Peraza Lope, and Delgado Kú 2010). A watery scene with a bound crocodile speared by Quetzalcoatl evokes imagery of the Venus god and cyclical ceremonies of world renewal embodied in the katun cycle. The mural in the Temple of the Niches (Q80), closely related to Mixteca-Puebla art, depicts four feathered serpents and five different temples dedicated to Quetzalcoatl-Kukulcan (see fig. 11.4), one for each of the five synodic periods of Venus (5×584) in the eight-year Venus Almanac (5×584 = 8×365). The Hall of Solar Symbols (Q161), depicting standard-bearers guarding the sun, displays a group of eight sun disks that may symbolize the eight-year period of the Venus Almanac (see figs. 11.1-11.3). These murals seem to reflect the most direct links with Central Mexico, probably owing to the presence of Mexican mercenaries described in the historical records.

MAYAPÁN'S HISTORY

Friar Diego de Landa's account says Mayapán was founded by Kukulcan, the ruler of the Itzás at Chichén Itzá (Tozzer 1941, 20–24n129). The Maya chronicles say that an Itzá contingent from Chichén Itzá founded Mayapán in Katun 8 Ahau (1185–1204; Milbrath and Peraza Lope 2003, 40, table 1). During Mayapán's early



Figure 11.2. Mural, Hall of Solar Symbols (Structure Q161): paintings in situ on the south face. Barrera Rubio and Peraza Lope 2001, plate 20. Courtesy of the Instituto Nacional de Antropología e Historia.

history, Landa tells us that the Cocoms (Itzás) lived peaceably with the Xius, a Maya group originally from the Puuc city of Uxmal, located in the same Tutul-Xiu "province" as Mayapán (Tozzer 1941, 27–30n161). The Xius may ultimately have come from a Nahuatl-speaking area, but by the time they settled at Uxmal they were thoroughly Maya, having adopted the Maya tradition of erecting stelae to mark katun endings (Milbrath and Peraza Lope 2009; Tozzer 1941, 29–30n159). They were probably responsible for Stela 1, inscribed with the katun ending in AD 1185, the Katun 10 Ahau (see fig. 11.11; Milbrath and Peraza Lope 2003, table 1). The Xius may have been at Mayapán before the Itzás formally "founded" the city in Katun 8 Ahau (Milbrath and Peraza Lope 2009).

Later in Mayapán's history the Cocom rulers allowed Mexican traders (Canuls) to live in the settlement in order to gain "riches," apparently referring to a lucrative trading relationship that involved slaves (Tozzer 1941, 32, 36). Landa notes that the traders of Yucatán exchanged salt, cloth, and slaves for cacao and "stone beads," most probably jade (Tozzer 1941, 36, 94–95). Eventually, the

Cocom ruler invited Mexican mercenaries from Tabasco and Xicalango to help him control the populace. Possibly these were warriors affiliated with the Aztec *pochteca* who came to Tabasco to trade with Potonchan, a Chontal-Maya town near the mouth of the Grijalva River (Milbrath and Peraza Lope 2003, 29–30, 35).

The presence of these foreigners at Mayapán is documented in the Book of Chilam Balam of Chumayel, which records that the Canuls "afflicted" the people of Mayapán for seven years, eating their food and destroying their crops, during the Katun 1 Ahau (1382-1401; Roys [1933] 1967, 142, 155). A political rift led a contingent of Xius to leave Mayapán early in this katun. About fifty years later, the increasing number of foreigners led the remaining Xius to revolt, and they killed the Cocom ruler and all his sons except one, who was traveling (Milbrath and Peraza Lope 2003, 37; Tozzer 1941, 37). The Xiu revolt was timed to correspond to Katun 8 Ahau (1441-1461), according to our analysis of the chronology in Landa and the Chilam Balam texts (Milbrath and Peraza Lope 2003, 37-38). This katun marked the transition point in the Xiu katun cycle, according to



Figure 11.3. Mural, Hall of Solar Symbols (Structure Q161): detail on panel from south face. Barrera Rubio and Peraza Lope 2001, plate 22. Courtesy of the Instituto Nacional de Antropología e Historia.

Munro Edmonson (1982, xvi). After the revolt, the Xius attempted to restore the Puuc heritage in the city by reerecting damaged stelae and destroying art commissioned by the Cocoms (Milbrath and Peraza Lope 2009, 602). All the murals were purposefully covered over with plain stucco before the site was abandoned (Barrera Rubio and Peraza Lope 2001, 437, 439). Ironically, this is why the three "foreign" mural programs discussed here are so well preserved.

HALL OF SOLAR SYMBOLS (STRUCTURE Q161)

The latest murals at Mayapán are ones that most clearly show the influence of foreigners from Central Mexico, most likely the Nahuatl-speaking mercenaries who resided in Xicalango under the control of the Aztecs (Milbrath and Peraza Lope 2003, 29). The Hall of Solar Symbols (Q161), a late addition to the Castillo, was

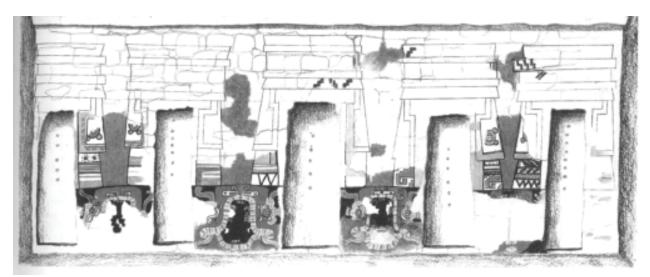


Figure 11.4. Mural, Temple of the Niches (Structure Q80): five temples with serpent balustrades. Barrera Rubio and Peraza Lope 2001, plate 5. Courtesy of the Instituto Nacional de Antropología e Historia.



Figure 11.5. Mural, Temple of the Fisherman (Structure Q95): a Chicchan fish-snake with Quetzalcoatl carrying an atlatl, plus speared fish and a bound crocodile. Drawing by Barbara Escamilla, from Barrera Rubio and Peraza Lope 2001.

dedicated to a solar cult like that of the Cuauhcalli (House of the Eagles) among the Aztecs (Barrera Rubio and Peraza Lope 2001, 439). Painted in blue, green, red, and yellow, the murals on the north and south sides of Q161 show a series of rayed solar disks with standard-bearers. Their closest parallels are to be found in Aztec art from Central Mexico, but some aspects of the murals can be compared to Late Postclassic Mixteca-Puebla art (see figs. 11.3, 11.7).

Mixteca-Puebla style murals in the Maya area, especially those at Santa Rita in Belize and Iximche and Utatlan in Guatemala show some parallels with the Q161 murals (Barrera Rubio and Peraza Lope 2001, 438, figs. 25, 27, 28). A mural showing two figures in profile striding toward a central solar symbol from Santa Rita Mound 1 recalls the format of the murals of Structure Q161 at Mayapán, but the two murals are quite different in stylistic details (see figs. 11.3, 11.6). Although the solar disks in the Mayapán murals are similar to those represented at Santa Rita and at more distant sites, like Mitla, these Mixteca-Puebla-style murals are painted in a more complex fashion, with dense design elements and black outlines, unlike the Mayapán murals (see fig. 11.6; Miller 1982, fig. 109). Closer to Mayapán, gilded copper

disks with a sun disk bearing four rays have been recovered from Chichén Itzá's Sacred Cenote, but their designs are more closely related to the Late Postclassic murals from Santa Rita, and the disks themselves may have been offerings brought by pilgrims from that site (Coggins 1984, 120–21, figs. 137, 138). Late Postclassic Aztec sculptures of sun disks sometimes display four rays, like the Mayapán examples, but often they are more complex with eight rays and a multitude of jade and feather symbols forming the corona (Pasztory 1983, plates 36, 85, 90, 234).

The costuming, proportions, and pose of the figures in the murals of Q161 resemble those seen in early Aztec art (see fig. 11.7). The Mayapán murals depict pairs of figures in profile facing each other across a central object (the sun disk). This sort of composition has been described as typical of early Aztec sculptures dating prior to 1427 (Umberger 1981, 225–26), but more recently, design formats of this sort have been dated somewhat later based on the fact that they are archaic designs inspired by Toltec art (López Luján 2006, 104, 114).

The standard-bearers are very much like those from Phase II of the Templo Mayor, dated between 1375 and 1427 (see fig. 11.7; López Luján 2006, 122; López Luján

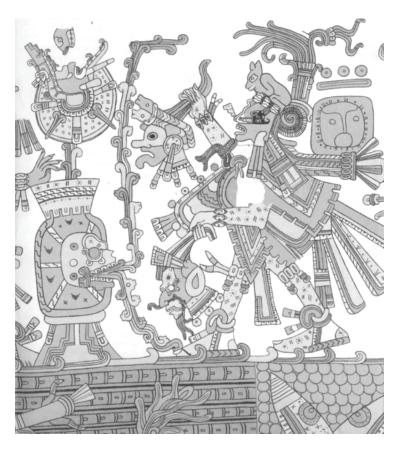


Figure 11.6. A mural from Mound 1, Santa Rita. After Gann 1900, plate 31.

et al. 2005, 26, 33; Milbrath and Peraza Lope 2003, 30). The solar murals in Q161 are probably the latest at the site, based on their context in a late addition to the Castillo (Q162) and their clear links with early Aztec art. Like the Templo Mayor mural, Mayapán's Hall of Solar Symbols is painted with broad areas of color, lacking the detailed cell partitions with heavy black lines typical of Mayapán's Mixteca-Puebla-style murals (Milbrath and Peraza Lope 2003, 20). This fact helps confirm links between Mayapán's Q161 murals and early Aztec art.

The use of Maya blue in both the Templo Mayor and Mayapán murals is a key to a significant connection between Mayapán and the Aztec area, although the Mayapán Q161 mural shows a more lavish use of this pigment and also includes green, a color not seen in the Templo Mayor murals (Milbrath, Peraza Lope, and Delgado Kú 2010, 2). The Aztecs or their Canul trading partners probably imported Maya blue from the area of Mayapán as early as 1375–1427 for the Templo Mayor murals (Phase II; Milbrath and Peraza Lope 2003, 30). The Canuls are also connected to the wave of Central Mexican influence at Mayapán seen in portable art and certain

architectural programs around this time (H18a, Q161, Q163; Milbrath and Peraza Lope 2003, figs. 19–21). They may have commissioned murals and sculptures in Structures Q161 and Q163 depicting Central Mexican deities.

Both Structures Q161 and Q163 were added to the Castillo near the end of the site's history, sometime between 1400 and 1450, based on our reconstruction of Mayapán's chronology in relation to archaeological data and historical records (Milbrath and Peraza Lope 2003, table 1). These renovations were probably completed under the direction of the Cocom ruler who brought more Mexicans into the city just before the Xiu revolt in Katun 8 Ahau. It is possible that artists came from Central Mexico to decorate halls used by the Canuls. The standard-bearers in murals of Q161 and Mayapán's stucco earth monster evoke forms developed in the Aztec capital and rarely seen beyond Central Mexico (see fig. 11.3; Milbrath and Peraza Lope 2003, 26, fig. 20b). It is interesting to note that H18a, an altar added at a relatively late time, was clearly remodeled to be more "Aztec" in style, elongating the proportions of the figure (compare figs. 20a and 20b in Milbrath and Peraza Lope 2003, 26).



Figure 11.7. A mural from the Templo Mayor, Phase II, Drawing by Fernando Carrizo. Courtesy of Proyecto Templo Mayor.

Apparently, the serpent figures originally created for the revival of the feathered serpent cult at Mayapán were covered over, indicating a change in religious focus at this time. We also see the introduction to Q163 of non-Maya deities such as Tlazolteotl and Xipe Totec, considered to be foreign deities in the Maya area (Milbrath and Peraza Lope 2003, 26, figs. 19, 21a; Taube 1992, 121-24). The colonnade of Q163 features modeled Atlantean figures of Tlazolteotl and Xipe Totec that were destroyed during the Xiu revolt, another indication that they represented gods of the foreigners.

Although only four solar disks are preserved in the eight rectangular frames, it is apparent that the mural design represents eight panels with sun disks in the center on the north and south sides, with a subsidiary theme represented by traces of painting in a corner area where Q161 meets the eastern staircase of the Castillo (see figs. 11.1, 11.2; Barrera Rubio and Peraza Lope 2001; Delgado Kú 2009). The grouping of eight sun disks on the two sides of Q161 may symbolize eight solar years in the Venus Almanac, representing the commensuration of five Venus cycles with eight years ($5 \times 584 = 8 \times 365$ days; Milbrath 1999, 183).2 The best preserved panels show a solar disk with a diving figure. These could be companions of the sun, evoking Aztec images of the deceased warriors who accompanied the sun when it rose from the eastern horizon to the zenith each day. Alternatively, the Sun God himself could be seen in various transformations over the course of eight years, or the diving figures may represent different aspects of Venus as a planetary companion of the sun over the course of the eight-year Venus Almanac.

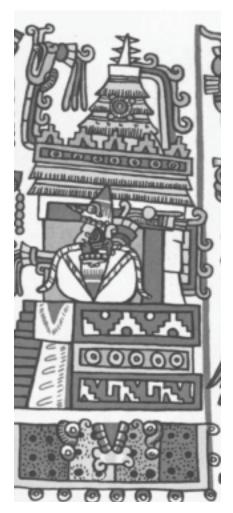


Figure 11.8. The Temple of Nine-Wind, the feathered serpent god, *Codex Nuttall* 15. Miller 1975.

TEMPLE OF THE PAINTED NICHES

Venus iconography also seems to be significant in the mural program on the south wall of the Temple of the Painted Niches (Structure Q80), excavated by Carnegie archaeologists in the 1950s. The mural is dated to the last of the four construction phases, but remains fairly well preserved because it was sealed by a thin layer of undecorated stucco (see fig. 11.4). Howard Winters (1955, 369) identified reptile heads in the mural as crocodilian earth monsters, but the dentition indicates that the figures are serpents (Barrera Rubio and Peraza Lope 2001, 430). They have red or blue feathery elements over their eyes, suggesting they are feathered serpents. They resemble plumed serpents on Mixteca-Puebla pottery from Cholula, dated 1350–1550 (McCafferty 1996, fig. 16f). The style of feathered serpent

imagery in Mayapán's Temple of the Painted Niches indicates a connection with Quetzalcoatl's Venus cult in the Mixteca-Puebla area, centered at Cholula, a pilgrimage site for worship of the feathered serpent. In Yucatán, the feathered serpent was known as Kukulcan, the Maya counterpart of Quetzalcoatl, a culture hero who was transformed into the morning star according to the *Anales de Cuauhtitlan* (Tozzer 1941, 133n621; Seler 1963), a construct that seems to be represented in the *Codex Borgia* (Milbrath 2013, 77, 108).

The five temples represented in the Q80 mural are related to the five feathered serpent temples with serpent balustrades in the central area of Mayapán (Pugh 2001, 255). The largest of the serpent temples, designated as Structure Q162 (the Castillo), is positioned in the center of a cosmic diagram marking five world directions (Pugh 2001, fig. 2). Landa's account refers to this pyramid as the Temple of Kukulcan, and he compares it to the principal pyramid at Chichén Itzá (Tozzer 1941, 24-25). Chichén Itzá's pyramid is more commonly called the Castillo, as is Mayapán's Q162 pyramid, which is a close copy but one that was created in a revival style hundreds of years later (Milbrath and Peraza Lope 2003, 8, 2009). Merideth Paxton (2001, 98-107) has pointed out that the Castillo at Chichén Itzá is similarly located at the center of the site. The centrality of the two pyramids dedicated to Kukulcan helps place the cult of the Venus god in a dominant position at both sites.

Recent research suggests that the five feathered serpent temples at Mayapán, modeled on prototypes at Chichén Itzá, were commissioned by the Cocoms, a faction most closely affiliated with the Itzá heritage associated with Chichén Itzá (Milbrath and Peraza Lope 2009). The Cocoms constructed their first revival-style serpent temple in the Katun 13 Ahau, according to our analysis of the architectural sequence (Milbrath and Peraza Lope 2003, 37–38, table 1, 2009). Apparently, the reintroduction of the feathered serpent cult took place at the transition point to a new Itzá katun cycle (Milbrath and Peraza Lope 2009, 597-600). The revival style at Mayapán was initiated in Katun 13 Ahau, the katun marking the transition to a new cycle of 256 years, as seen in the katun wheels pictured in Landa's Relación de las Cosas de Yucatán and the Books of Chilam Balam (Tozzer 1941, 167; Roys [1933] 1967, fig. 28).

The five feathered serpent temples and their counterparts in the murals of Q80 relate to the Venus cycle, not only because they represent the Venus serpent but also because the symbolism evokes the "fiveness of Venus" in

relation to the eight-year Venus Almanac (see fig. 11.4; Milbrath 1999, 183, 187). One temple represents each of the five synodic cycles in the Venus Almanac of eight solar years, a cycle also seen in Postclassic Maya and Mixteca-Puebla codices (*Dresden Codex* 46–50 in Thompson 1972; Codex Borgia 53-54 in Milbrath 2013, plate 16). The five temples are different, but all probably had jade symbols on the sides. They may be the five different "houses" of Venus symbolizing different synodical cycles in the Venus Almanac. The serpents between each temple could be seen as a pair of serpent heads in profile, as suggested in the reconstruction painting by Proskouriakoff (1962, fig. 3d; Milbrath and Peraza Lope 2003, fig. 23). In this case, they would represent the serpent balustrades carved in threedimensional form in Mayapán's five serpent temples (Pugh 2001, 255). The serpent images also form four frontal serpent faces. These could represent the four different phases of the Venus cycle (morning star, superior conjunction, evening star, and inferior conjunction).

The Temple of the Painted Niches has five niches that depict doorways for the five temples painted around the niches. These were intended for offerings or deity figures, and the niches may have been used in sequence over the course of five Venus cycles to mark the five divisions of the Venus Almanac. The niches have vertical columns of dots, varying in number from six to eight, painted either solid red or blue. Anthony Aveni (personal communication 2007) has suggested that these sets may count the period when Venus is in inferior conjunction, which has a mean of eight days. Alternately, the numbers may represent a calendar inscription, like the Mexican inscription on Chichén Itzá's Venus Platform, which has a string of eight dots representing the eight-year cycle of the Venus Almanac (Milbrath 1999, fig. 5.5a). This inscription also has the Maya number 5 (a bar) tied to a Venus glyph, symbolizing five Venus cycles, alongside a Central Mexican year bundle with a year sign framed by the number 8, signifying the equation of eight solar years and five Venus cycles.³ The upper part of the Mayapán mural is red and the lower part black, a division that evokes the colors associated with day and night (Barrera Rubio and Peraza Lope 2001, 429). These two colors also appear on columns in a niche used to observe the sun and Venus in the Caracol at Chichén Itzá, an "observation post" for tracking these two celestial bodies on the horizon, which could help determine the eight-year interval of the Venus Almanac (Milbrath 1999, 177).

At least two of the temples have a symbol known in Central Mexico as *chalchihuitl*, the Aztec symbol for

"precious stone," usually representing jade but also sometimes used for turquoise (Barrera Rubio and Peraza Lope 2001, 420-30; Delgado Kú 2009). This symbol is also seen on the roof of a Mixteca-Puebla temple dedicated to Ehecatl-Quetzalcoatl (Nine-Wind) in the Codex Nuttall (see fig. 11.8; Milbrath and Peraza Lope 2003, 27). The circular disk representing jade or precious stone on the Mayapán temples may be an astronomical symbol in some contexts. The same symbol appears with the sun and moon on Codex Borgia 33 and in a sky band on Structure 16 at Tulum (Mural 3), both instances of an astronomical context that is directly associated with celestial imagery (Milbrath 1999, fig. 3.3a, 2013, 84, 88, 137n29, plate 5; Miller 1982, plate 39). In the Mayapán mural, the precious chalchihuitl has an embedded eye, a symbol used for stars in Mixteca-Puebla art and the East Coast International Style, which reinforces the astronomical symbolism (compare Milbrath 1999, fig. 7.1a and b).

The five temples in the murals are slightly different in detail, but all seem to be related in some way to a representation of Quetzalcoatl's temple in Codex Nuttall 15 (fig. 11.8; Milbrath and Peraza Lope 2003, 27). One temple has dark spots that are very similar to those on the earth band below the temple represented on Codex Nuttall 15. Another temple in the Q80 painting has a step fret similar to the platform of the Codex Nuttall temple. The Codex Nuttall temple was designated as Quetzalcoatl's Temple of Turquoise in Acatlan, Puebla by Alfonso Caso (1979, 1:56), but more recently has been identified as the round "wind temple" from the Place of the Red and White Bundle in the Mixteca Alta, Oaxaca (Byland and Pohl 1994, 76-80, fig. 30). Regardless of the exact designation, the Codex Nuttall temple features a feathered serpent, and it houses the cult of Nine-Wind, indicating that it is a temple linked with Ehecatl-Quetzalcoatl and the Venus cult.

Mural paintings in Q80 reflect Mayapán's participation in the Mixteca-Puebla style (Barrera Rubio and Peraza Lope 2001, 443, plates 5–11; Milbrath and Peraza Lope 2003, 26–27). The Mayapán mural displays small areas of blue, black, red, white, and yellow outlined in black, forming color cells that are typical of Mixteca-Puebla codices like the *Codex Nuttall* and *Codex Borgia* (see fig. 11.8). This format is also apparent at Tulum in Mural 10 of Structure 16, one of the few polychrome murals at the site (Miller 1982, plate 33). The painted stucco mask above Mural 10 has beaded fillets around the eyes like the reptiles in the Mayapán mural and some other deity representations at Mayapán (see fig. 11.11), also seen in Postclassic Maya codices (Milbrath 1999,

figs. 5.9a-f, 6.3a-f; Milbrath and Peraza Lope 2003, 26; Proskouriakoff 1962, figs. 3d, 7a, 12a). Arthur Miller (1982, 70-73) dates most of Tulum's paintings after 1400, suggesting they relate to an influx of foreign ideas from the Mixteca-Puebla International Style.⁴ Although Miller's mural chronology has been called into question, especially in relation to Tancah (Ball in Miller 1982, 105), some stylistic variations may reflect chronological changes. The early phase of Structure 1 (Structure 1-sub), dated to the Early Postclassic by Miller (1982, 68, plates 13-22), employs more colors (orange, blue, and black) and has a more fluid design than later murals in Structures 5 and 16, which have dense designs in black and two shades of blue (Miller 1982, plates 28-37). These early murals are the ones that are most comparable to those in Q80 at Mayapán, so presumably they are contemporary, perhaps around 1300-1400.

TEMPLE OF THE FISHERMAN

On a horizontal surface in Structure Q95 that was overlooked by the Carnegie project, archaeologists from the Instituto Nacional de Antropología e Historia (INAH) uncovered a mural in the Temple of the Fisherman (Templo del Pescador) that depicts an elaborately dressed male in a watery scene with speared marine creatures, including sharks, a marine snake, and a crocodile bound with ropes (see fig. 11.5; Barrera Rubio and Peraza Lope 2001, 442-43, fig. 31, plate 32). The shell on the fisherman's torso seems to be an olive shell, as suggested by the markings at the ends and the crenellations along the opening. A similar shell is devoured by a fish in the lower mural of Tulum Structure 5 (Milbrath and Peraza Lope 2003, 28; Miller 1982, plate 28). The substructure of Tulum's Castillo has a depiction of a fish and a crocodile in water with undulating waves similar to those in Structure Q95 (Barrera Rubio and Peraza Lope 2001, 443, figs. 32-33; Miller 1982, plate 14). The lavish use of Maya blue is apparent in Mayapán's Temple of the Fisherman, as in the Tulum murals, but more colors are generally used in the mural painting at Mayapán. The Temple of the Fisherman mural is rendered with the small color cells outlined in black, characteristic of the Mixteca-Puebla style and the East Coast International Style at Tulum, which closely parallels murals in the Temple of the Fisherman (Milbrath and Peraza Lope 2003, 27).

The setting for the mural is marine and includes representations of waves, sharks, a queen triggerfish (*Balistes*

vetula; Nayeli Jiménez Cano, personal communication 2016), and a crocodile, either Morelet's crocodile (Crocodylus moreletii) or the American crocodile (Crocodylus acutus) found in mangroves along the coast of the Yucatán (Schlesinger 2001, 233–35). What at first seems to be a fishing expedition may be linked to cosmology and related ritual activities. Sharks and triggerfish are symbols of blood sacrifice, for shark's teeth appear in bloodletting imagery and triggerfish spines found in archaeological contexts at Cozumel were apparently used in bloodletting ceremonies (Schlesinger 2001, 307). The bound crocodile also has ritual significance because it appears in katun ceremonies, as will be discussed.

Although his face is no longer preserved, the male figure wearing a large shell has been identified as Quetzalcoatl (Taube in Stuart 2005, 179; Masson and Peraza Lope 2007; Vail 2006). This Venus god shown in the act of spearing evokes links with the Venus god spearing water and the water goddess in the Venus Almanac on *Codex Borgia* 53, a codex that dates from around 1500 (Milbrath 2013, 15, fig. 4.1). The Venus Almanac may have originated in Central Mexico and was later transferred to Yucatán via codices brought from Central Mexico. Indeed, the *Codex Madrid* and *Dresden Codex* are both Maya manuscripts that incorporate Central Mexican deities and calendar constructs (Milbrath 1999, 173–74; Paxton 2011:151; Vail and Aveni 2004).

We can see a close parallel between the fish-snake in the mural and the Chicchan serpent in the *Codex Madrid*, which is represented with similar Chicchan serpent spots and paired parallel bars as body markings (fig. 11.9; Milbrath and Peraza Lope 2003, 28, 2009, 196–98; Milbrath, Peraza Lope, and Delgado Kú 2010). The Chicchan serpent seems to be an embodiment of the feathered serpent, an animal counterpart of Quetzalcoatl that represents Venus (Milbrath 1999, 181–86; Taube 1992, 140). The suggested date for this Mayapán mural (around 1400) falls within a span of dates suggested for the *Codex Madrid*, between 1300 and 1450 (Milbrath and Peraza Lope 2003, table 1; Vail and Aveni 2004, 11).⁵

Another parallel with a Maya codex can be seen in the image of the crocodile with bound jaws, which evokes a comparison with images in the *Paris Codex* katun pages (fig. 11.10). A bound crocodile serves as a throne in all of the surviving katun pages of the *Paris Codex* (2–11). Given the lack of a katun inscription in the Mayapán mural and the imagery featuring Quetzalcoatl, the spearing event involving the bound crocodile seems to have some mythological or cosmological significance.

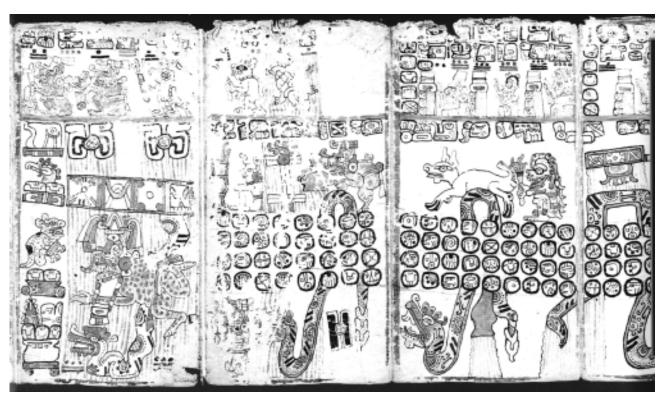


Figure 11.9. Chicchan serpents in the Codex Madrid, 11-14. After Milbrath 1999. Courtesy of Museo de América, Madrid.

Vail (2006) sets the Mayapán mural in the context of creation cosmology (see also Vail and Hernández 2013, 53, 450). Following up on an interpretation of the mural published by David Stuart (2005, 179), Vail suggests that the image of the crocodile in the mural refers to the epic flood associated with the death of a cosmic crocodile. Instead of the Classic Maya image of the great flood, which alludes to the decapitation of a crocodile, the Mayapán image follows Central Mexican patterns, with the crocodile speared by Quetzalcoatl. Vail (2006) also compares the Mayapán mural to the Dresden Codex 74, which she interprets as the great flood issuing from the cosmic crocodile's body, an interpretation supported by Eric Velázquez García (2006) and Karl Taube (1989) and originally canonized in J. Eric Thompson's (1972, 20, 88-89) commentary on the Dresden Codex (but see Milbrath 1999, 281).

Given the emphasis on seasonal cycles and the lack of mythological narratives in the *Dresden Codex*, page 74 more likely represents an inundation during the rainy season rather than a cataclysmic flood (Bricker and Bricker 2011, 442–43; Milbrath 1999, 281, fig. 7.4d). Nonetheless, *Dresden* 74 could also refer to creation cosmology if it references a seasonal ritual symbolizing

primordial events. This interpretation is in keeping with other examples in the codices and Landa's account, most notably the annual ceremonies of the five-day Uayeb at year's end. In fact, the epic tale of the great flood in Landa immediately precedes his account of the year-end ceremonies involving the erection of piles of stone where idols were installed in preparation for the New Year (Tozzer 1941, 136–49).

At the time Landa was writing, the New Year fell in mid-July, when seasonal rainfall was at a peak, an inundation evoking the "great flood" that called for rituals to stabilize world order during the Uayeb. The Dresden Codex (25-28) Uayeb festivals show acantuns, literally "set-up stone pillars," raised in the four directions, like the piles of stone erected at the directional entries to a village during the Uayeb ceremonies described by Landa (Thompson 1972, 91). It is noteworthy that as in Landa's account, where the flood precedes a year-end ceremony involving the erection of stone pillars symbolizing world trees, the torrential downpour on Dresden 74 (dated to mid-July by Bricker and Bricker [2011, 442]) immediately precedes the Uayeb ceremonies (in July at the time of the conquest). The Uayeb pages on 25-28 have been renumbered as pages 55-58, and they

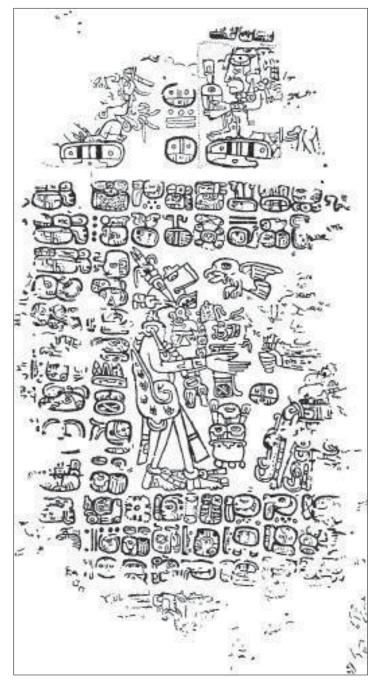


Figure 11.10. The *Paris Codex* 6, showing katun ceremonies with God K's head carried to a deity enthroned on a bound crocodile. Villacorta and Villacorta (1933) 1977.

directly follow the flood scene on page 54, erroneously numbered as page 74 before these two fragments were properly aligned on the same side of the codex. By tradition, we continue to use the old numeration, but the new page numbers help convey a connection between the flood scene and the rituals of the Uayeb, visualized as an annual celebration of the erection of the world trees

after the great flood. These ceremonies are important in establishing order in the calendar and are ultimately designed to restore world order.

The scenes on *Dresden Codex* 25–28 (55–58), interpreted as representations of the Uayeb by Cyrus Thomas in the nineteenth century and later by J. Eric Thompson (1972, 89) and other scholars (Bricker and Bricker 2011, 124–37), are often referred to as New Year ceremonies because they were ceremonies for the incoming year. The upper set of images with the possum bearing a deity on its back symbolizes the Pauahtuns honored at year's end in Landa's account (Milbrath 1999, 150; Tozzer 1941, 135–49). In the *Dresden Codex* the acantun is represented by the *acante* trees, each with a glyph for tun or "stone" (T548).

The trees represented in the Uayeb ceremonies on *Dresden Codex* 25c–28c have been linked to imagery of stone monuments as world trees (Newsome 2001, 213–14; Paxton 2001, 40–41; Thompson 1972, 91). Stone stelae often record period endings, showing time as an ordering principle in the cosmos. Monuments recording katun endings may be linked with concepts of the re-creation of the world, and vestiges of this concept survive today in Zinacantan's New Year ceremony and Chamula's Festival of Games (Bricker 1984, 1989; Newsome 2001, 214–22; Vogt 1976, 128–89).

The gods standing with stone "trees" on *Dresden Codex* 25c–28c may relate to the Bacabs in Landa's account of the Uayeb ceremonies, who also are linked to cosmological events; when four Bacabs were placed in four parts to the world after the great flood, and they in turn placed four trees to hold up the heavens, each was associated with a different direction, color, and year bearer (Milbrath 1999, 150; Roys [1933] 1967, 99–100; Tozzer 1941, 136–38). Like the Bacabs in Landa's account, the gods in the *Dresden Codex* Uayeb ceremonies are accompanied by stone trees or pillars marking the four world directions.

According to the *Chilam Balam of Chumayel* and parallel versions in the Tizimin and Mani texts, the sky fell and the flood ensued, after which world order was restored when the four Bacabs set up trees of different colors to mark the cardinal directions (Roys [1933] 1967, 99–10113). The Chumayel text specifically mentions setting up the idol of katun in this context, which Ralph Roys ([1933] 1967, 10111) interprets as a numerical marker for the sequence of thirteen katuns in the calendar cycle. Directly following the account of the annual cycle of festivals that close with the Uayeb (featuring the Bacabs), Landa mentions setting up idols as katun markers (Tozzer 1941, 166–69), which shows us that establishing

orderly time following the great flood involves both the annual festivals and the count of katuns.

The katun cycle itself also refers to reestablishing world order because the "zero date" for the Maya Long Count calendar fell on 13.0.0.0.0 in 4 Ahau 8 Cumku (3114 BC), which was both a katun ending and a baktun ending, and presumably also the mythical foundation date for the calendar. Matthew Looper (2003, 127–28, table 4.1) points out that at Quirigua, texts on Stela F marking the Katun 4 Ahau in August 731 compared the katun ending to the mythical creation of the world in 4 Ahau 8 Cumku, 13.0.0.0.0. He notes that parallels can also be seen in modern Chorti ceremonies evoking creation events because recording the katun ending is comparable to setting stones in Chorti shrines. And Looper (2003, 127) concludes that the decapitation event recorded in the Quirigua text (A12-B14) can be linked with the decapitation of the turkey in the Chorti ceremony. Decapitation rituals involving birds are also seen in the year-end ceremonies in the Codex Borgia (49-52) and in the Dresden Codex (25c-28c), where these acts are associated with cosmic trees or stone pillars symbolizing acantuns and rituals designed to restore world order.

Elizabeth Newsome (2001:199) sees a direct connection between katun monuments, cosmic trees, and stone cycle markers in the Maya mythology of world creation. Newsome relates the stelae in Copan's Great Plaza to creation cosmology and the world trees and stones set up by the gods. Katun records are important in this set of monuments, especially Stelae B, C, and F. These stelae recall the katun "idols" in Landa's account, markers of time that are also a symbol of the ordering principle of the calendar.

A katun inscription on Mayapán Stela 1, recording a twelfth-century katun date, displays imagery of a bound crocodile forming a throne like that seen in the Paris Codex katun rituals (figs. 11.10, 11.11).6 Another parallel image in both the Paris Codex and Mayapán stela is the katun bird representing the *mut*, or omen, of the katun. The katun lord in the Paris Codex carries God K's head to an enthroned deity, evoking a comparison with Stela 1, where God K's head is featured in the headdress worn by the enthroned god (Milbrath and Peraza Lope 2003, 39). God K is an essential deity in the Paris Codex katun ceremonies; even though deities change from page to page, he is represented on every page (Paris Codex 2-11). It is noteworthy that God K (Kawil) plays a central role in the imagery of katun monuments in the Classic period, paralleling his importance on Early Postclassic Mayapán Stela 1 (Milbrath 1999, 239; Milbrath and Peraza Lope 2003, 39).



Figure 11.11. The Mayapán Stela 1 with the Katun 10 Ahau inscription and deity wearing a God K headdress seated on a throne with a bound crocodile. After Milbrath and Peraza 2003, fig. 30.

A long-term pattern extending into the Early Postclassic links records of katun endings to times when Jupiter or Saturn was in retrograde motion. Katun ceremonies seem to be intimately related to astronomical cycles, suggesting that these two planets play a role in reestablishing world order by synchronizing the katun rituals with astronomical cycles. Given God K's clear connection with the katun cycle and the importance of katun endings as markers of the planetary cycles of Jupiter and Saturn (Milbrath 1999, 239, 2005), it is noteworthy that God K plays a role in the flood and that the flood itself is related to a disruption in the katun cycle.

The Chilam Balam of Tizimin recounts that when the earth monster, Itzam Cab Ain, was killed, the great flood that ensued brought an end to the "word of the katun" (Edmonson 1982, 41; Vail 2006), which indicates that world destruction is somehow linked to the end of katun records. In the Chilam Balam of Chumayel, Bolon Dzacab, God K's alter ego, plays an important role during the flood, carrying seeds of edible plants up to the thirteen heavens and saving them from destruction (Roys [1933] 1967, 99). Although God K does not appear in the Dresden Codex "flood" scene, where we see instead the Venus god known as God L, he appears in the next two pages in Uayeb ceremonies (seen on both Dresden 25 and 26) designed to reestablish the ordering principle of the calendar and re-create the cosmological foundation events when the skies were raised after the flood (Milbrath 1999, 227).8

The gods receiving the head of God K in the katun pages of the Paris Codex all sit on a bound crocodile that forms a throne, the same format seen in a katun monument from Mayapán (Milbrath and Peraza Lope 2003, 39, figs. 30, 31). The bound crocodile in the Temple of the Fisherman mural relates directly to the katun pages of the Paris Codex and Mayapán Stela 1, but the mural has a narrative quality that suggests a mythological context rather than a specific katun ritual. We see a watery scene that has been interpreted as the great flood, but this scene in the Mayapán mural shows a Central Mexican Venus god, rather than a Maya deity. Nonetheless, the katun cycle may be part of the reference, for the iconography of the Temple of the Fisherman shows imagery that can be linked to both the Paris Codex katun pages and the only surviving katun page in the Dresden Codex (60), where we see a Venus god (God L) with a spear, recalling the warlike Venus gods in codices who represent the morning star in the Venus Almanac.

The Dresden Codex shows that Venus gods were

prominent in katun imagery, apparently supplanting God K at a time when Jupiter and Saturn were no longer in retrograde motion at the katun's end (Milbrath 2005). For this reason, God K no longer had a dominant role in the katun ceremonies. By the Late Postclassic, around 1350-1400, when the Temple of the Fisherman was painted, the focus had shifted to Venus imagery, and the planets Jupiter and Saturn had ceased to play a role as markers for the katun ending (see note 7). This may be why Ahau dates that traditionally marked katun endings became so important in the Late Postclassic Venus cycle (Milbrath 1999, table 5.1). Although the cycle of katuns still formed a basis for the calendar, Venus had become the paramount planet in Late Postclassic rituals at Mayapán, and thus the Venus god, Quetzalcoatl, was central to mural imagery that alludes to reestablishing the world order by binding the crocodile and thereby controlling his destructive power.

CONCLUSIONS

Returning to the Mayapán mural complex as a whole, we can trace religious changes evident in the shifts in both iconography and stylistic influences over time. The latest murals emphasize solar worship, a main focus among the Aztecs, and Central Mexican religious concepts clearly inspired the mural program in the Hall of Solar Symbols (Q161). Not only is the iconography similar to early Aztec murals, but also the style of representation is similar with two striding figures facing a central image and wide blocks of color virtually lacking cell partitions separating the colors. The diving gods shown on each sun disk may also refer to Venus, and their context on eight sun disks suggests a link with the eight-year Venus Almanac originally introduced from Central Mexico with the cult of Ouetzalcoatl-Kukulcan.⁹

Quetzalcoatl, the supreme Venus god, was first represented in Mayapán's feathered serpent temples beginning around 1300 and somewhat later in Structures Q95 and Q80, with murals dating between 1350 and 1400/1425. Murals from the Temple of the Five Niches (Q80) display five images of the feathered serpent, suggesting a connection with the five serpent temples at Mayapán. The Venus serpents in five Venus temples indicates a symbolic link with the five Venus cycles in the eight-year Venus Almanac. The style and iconography of the murals reflect links with the widespread Mixteca-Puebla style, centered in an area spanning from the Puebla-Tlaxcala Valley

south to Oaxaca, an area of intensive worship of Quetzalcoatl.

In the Temple of the Fisherman (Q95), probably the earliest Mayapán mural considered here, we see a stylistic link with the Mixteca-Puebla traditions, but the strongest parallels are with sites like Tulum and Santa Rita, representing the East Coast International Style as a regional transformation of the Mixteca-Puebla style of Central Mexico. The Temple of the Fisherman blends stylistic elements from both Maya and Mixteca-Puebla art and also seems to express the cosmological principles related to these two different areas. The Mayapán mural introduces Venus imagery in the form of Quetzalcoatl, representing a religious change that seemingly moves away from the katun cycle seen earlier at Mayapán in the stela cult. The imagery of spearing in the mural may relate to the Central Mexican Venus Almanac, but the bound crocodile harkens back to katun imagery, now transformed by the cosmological themes represented in the narrative. The mural symbolizes both the annual seasonal inundation (when water rises in the cenotes and on the shore) and the cataclysmic flood at the end of the previous world age, which heralded the disruption of the Maya katun cycle, as an ordering principle of the Maya calendar. Thereafter, a religious transformation is seen in the more direct connection with the Mixteca-Puebla style evident in the Temple of the Niches and its thematic connection to Quetzalcoatl, the Venus God, playing a role in the Venus Almanac. Somewhat later, around 1450, the Hall of the Sun Disks displays a clear link to the Venus Almanac, but Venus now takes a secondary role, with the emphasis shifting to solar imagery borrowed more directly from Central Mexico. The transformation of Mayapán's calendric and religious imagery was complete—a Maya site turned Mexican, an unstable situation that would not long endure.

NOTES

- For the locations of settlements mentioned here, see map 1.6.
- 2. The equation between five Venus cycles and eight solar years is made explicit in the Venus Almanac of the *Dresden Codex* on pages 46–50 (Bricker and Bricker 2011, 167; Milbrath 1999, 170–73; Thompson 1972, 62–71).
- 3. Visual imagery equating five synodic periods of Venus to eight solar years may have originated at Teotihuacán, where the relationship is symbolized by the trapeze and

- ray year sign associated with Tlaloc imagery (Carlson 1993a, 1993b). Both Mayapán and Teotihuacán lack apparent Venus alignments in architecture (Aveni, Milbrath, and Peraza Lope 2004; Milbrath 1999, 186–87), but if the Venus cycle was encoded in the eight-year Venus Almanac, it may not have been necessary to use architectural orientations to track this cycle.
- 4. Based on ceramics, Ball (in Miller 1982, 110) sets the foundation of Tulum around 1250, so the earliest murals could date to that time, while the latest murals could be as late as ca. 1520, when the city was first seen by the Spaniards (1518). Nonetheless, as previously noted, Tulum was occupied as early as AD 1000, so there may be earlier murals.
- 5. Gabrielle Vail (personal communication 2002) notes that the Codex Madrid could be from Mayapán, based on comparisons of the Q95 sea serpent and the Chicchan serpent, as well as similarities between Mayapán's ceramics and those represented in the codex. Vail also notes that Mayapán was a multilingual city, paralleling the multilingual aspect of the codex, which records both Yucatec and Western Cholan words.
- 6. Our analysis of the katun stelae at Mayapán places Stela 1 as the earliest of the katun records dating to 1185 (Katun 10 Ahau). The Katun 10 Ahau ending inscribed on the monument was originally dated to 1445 by the Carnegie project, but an earlier date is suggested by recent studies of Mayapán chronology (Milbrath and Peraza Lope 2003, table 1; Schele and Mathews 1998, 204).
- 7. By the Late Postclassic, a long cycle of katun endings that corresponded to the retrograde cycles of Jupiter and Saturn had come to an end (Milbrath 2005). By 1362 (Katun 5 Ahau), stelae were no longer erected at Mayapán, as indicated by a halt in the sequence of katun monuments and the burial of the stela platform (Milbrath and Peraza Lope 2003, table 1, 2009). The Late Postclassic represents the third and final break in the synchronicity of the katun endings and the planetary retrograde for pre-Columbian Maya records. The katun cycle was not abandoned in 1362, only the tradition of carving katun monuments ceased. Although katun ending dates were not recorded on stelae after this time, other forms of katun records survive at Mayapán, including portable art such as the jaguar altar with a Katun 3 Ahau date (Milbrath and Peraza Lope 2003, fig. 32). The central plaza contains clear evidence of thirteen layers, and a number of scholars have commented that these renovations of the plaza seem to relate to the cycle of thirteen katuns. In fact, the political revolt that ended Mayapán's role as a capital city in Katun 8 Ahau marks one complete katun cycle (about 256 years) from the earliest foundation date in the Chilam Balam chronicles (Milbrath and Peraza Lope 2003, 40, table 1).
- 8. Accounts noting that the earth crocodile is decapitated or dismembered evoke links with Central Mexican cosmological events, such as when Quetzalcoatl and

Tezcatlipoca re-create the world by splitting the monster in two (Velázquez García 2006, 8). In terms of counterparts with Maya imagery, it is noteworthy that as a Venus god, Quetzalcoatl is the counterpart of God L on *Dresden Codex* 74, just as Tezcatlipoca is the counterpart of God K, a central character in Maya calendar ceremonies.

9. Others have explored Venus imagery in relation to the Q161 murals. Ruiz Gallut, Galindo Trejo, and Flores Gutiérrez (2001) propose a scenario that involves observations taken from the Round Temple to the base of the south wall of Structure Q161 and which would determine the dates when the paintings would have been directly illuminated by the sun. They use the intervals between these dates to derive numerical ratios that correspond to the Venus synodic cycle and chart the movement of Venus, the Milky Way, and other night sky objects over the building from the same perspective in the late thirteenth century. However, this date seems too early for the construction of Q161, which was the latest of a series of additions to the Castillo and probably dates from no earlier than 1375 (Milbrath and Peraza Lope 2003, table 1).

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Pre-Hispanic Maya Solar Symbolism Illustrated in Diego López de Cogolludo's Historia de Yucatán

Merideth Paxton



he text of the *Historia de Yucatán*, by Friar Diego López de Cogolludo ([1688] 1957), includes a single illustration (fig. 12.1), which clearly blends Maya and European elements. The most obviously Maya aspect of the image is the band of portraits around its perimeter; this band shows thirteen men, all of whom are identified by their Yucatec names. At the same time, the overall composition recalls a Spanish coat of arms, and the motifs include a tree rendered according to European conventions of perspective. Despite these non-Maya elements, the placement of the tree in the center of the design suggests that it may represent the yaxcheel cab, a key symbol in the pre-Hispanic Yucatec system of the world directions. The fundamental question of this investigation is whether the tree and other forms in the scene published by López de Cogolludo can be interpreted as a Colonial period representation of the solar-based directional scheme that provided a sacred ordering of time and space during the preconquest era. This important cultural premise predicted the overall fates of communities while it also controlled the rotation of ritual and political power.

THE SOLAR DIRECTIONS AND THEIR IMPORTANCE

Yucatec Definitions

The Yucatec Maya concept of the directions, whose essential components have remained unchanged from the

preconquest period through the present, derives from the apparent annual motion of the sun. One of the earliest European records of the system was made between 1606 and 1631 by Bernardo de Lizana ([1633] 1988; quoted by Tozzer 1941, 16n94), who stated, "They call the east likin which means 'where the sun rises above us.' And the west they call chikin, that is 'the fall or end of the sun' or 'where it hides itself from us." To an observer, the positions of sunrise and sunset seem to shift along the eastern and western horizons (Aveni 2001, 55, 58, 63-65). Thus, the pre-Hispanic Yucatec Maya recognized not only the four cardinal points, but also the segments of the horizons encompassing them. This fundamental understanding is followed even now, and the principal directions, east and west, are determined by limits established by sunrise and sunset on the annual dates of the solstices. North and south are the remaining spaces along the horizons. The central place of the observer constitutes the fifth direction, as shown by the spatial diagram that Alfonso Villa Rojas ([1968] 1988) constructed from what he had learned about the twentieth-century beliefs of the residents of X-cacal, Yucatán (fig. 12.2).

Pre-Hispanic Illustration of the Directions

The only clear pre-Hispanic depiction of all of the Yucatec Maya world directions is found in the *Madrid Codex* (or *Codex Madrid* [1967]), also known as the *Codex Tro-Cortesianus*. Because of this significance, an overview of

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Figure 12.1. Tree surrounded by Maya lords, copied from a Maya painting. Published in the *Historia de Yucatan*, by Diego López de Cogolludo, first edition (1688, p. 133). Reproduced from Gates 1932, 4.

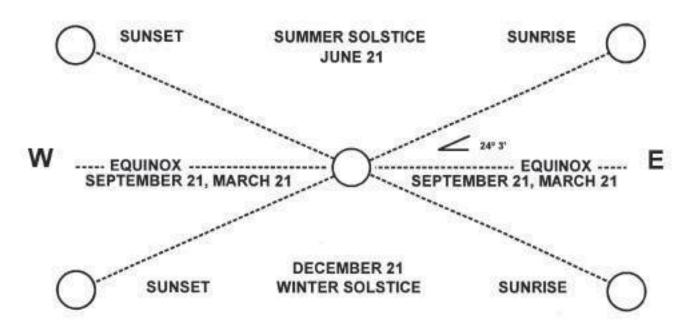


Figure 12.2. World directions of the modern Yucatec Maya, as recorded in X-cacal by Alfonso Villa Rojas. Drawn by the author, based on Villa Rojas (1968) 1988, 129.

scholarly opinions concerning the origins of the manuscript precedes further discussion of the image. No European records concerning the acquisition of the screenfold document from the Maya are known, and the working assumption that it is preconquest and from Yucatán is based on examination of its contents and physical properties.

J. Eric S. Thompson ([1950] 1960, 26) thought of the Madrid Codex as inferior to the two other preconquest Maya codices, the Dresden Codex (1975) and the Paris Codex (1968), in terms of intellectual content, and he commented on the lack of precision in the rendering of its illustrations.³ These opinions led him to propose that it dates from the late pre-Hispanic period. At one stage of his investigations, he thought the document could possibly have been confiscated from the inhabitants of Tah Itzá (Tayasal, also known as Noh Petén), Guatemala. This was the last Maya polity to be subjugated, in 1697, through Spanish military conquest. Based on his analysis of the dates recorded in the codex, Thompson (1972, 16) eventually discounted the idea that it had come from Tah Itzá; he proposed instead that it was from the western part of the Yucatán Peninsula. He also considered it to be pre-Hispanic, and these views became widely accepted.

The positions advocated by Thompson have subsequently been challenged; the question of Tah Itzá provenience was reopened by Michael Coe (in Coe and Kerr

1998, 181) and by James B. Porter (1997, 41, 43). Coe remarked on the possible incorporation of European paper in pages 1/57 and 56/112, and Porter identified some of the items in the illustrations as Spanish.⁴ These proposals have led to more general reconsiderations of other questions pertaining to the provenience of the manuscript. The investigations have established that the European paper is attached to the codex, not integral to it (Bricker 2004), and that the objects thought to derive from the material culture of the Colonial period have pre-Hispanic counterparts (Graff and Vail 2001; Paxton 2004). Additional reasons for associating the Madrid Codex with Yucatán have been provided by John F. Chuchiak (2004) and myself (Paxton 2004). Moreover, recent analysis of the red pigment used at Mayapán and in the manuscript has revealed the same composition of hematites and kaolin. In combination with other facts, this suggests that the codex could have been painted there (Domenici 2013).5

The pre-Hispanic diagram of the world directions that relates elements from the Maya calendar system to geographic space is painted on pages 76–75 of the manuscript (fig. 12.3). The calendrical components include a sequence of large dots, arranged in a pattern resembling a Maltese cross, that represent the 260 days of the tzolkin. In general terms, this repeating cycle links twenty day names with thirteen numerical coefficients.

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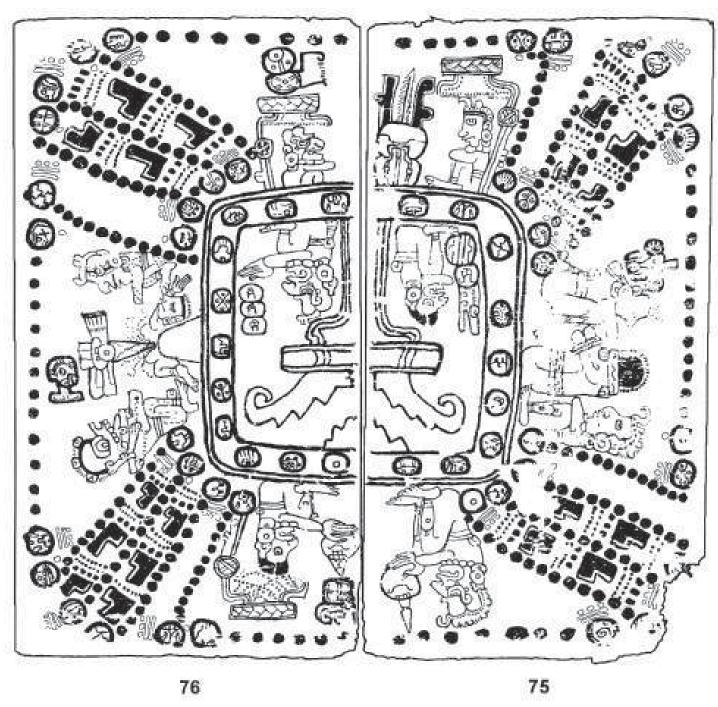


Figure 12.3. Pages 76-75 of the Codex Madrid (1967), drawn from Codex Tro-Cortesianus by the author.

In the *Madrid* diagram, the progression is divided into twenty subunits consisting of sets of the large dots (the number in each group varies, but is approximately twelve) and a named tzolkin day. As other researchers have noted (Aveni 1980, 155–56; León Portilla [1968] 1988; Villa Rojas [1968] 1988, 127–34), the X-shaped division of the composition around the center sector resembles the pattern derived from sunrise and sunset

observations between solstices that is recognized at X-cacal and other settlements. The glyphs of the perimeter directions are included in positions that correspond approximately with the cardinal points.

Elsewhere I (Paxton 1997, 2001b) have proposed that the footprints connecting the center area with the outer (solstice) corners symbolize the apparent annual motion of an aspect of the Sun God, who is one of the

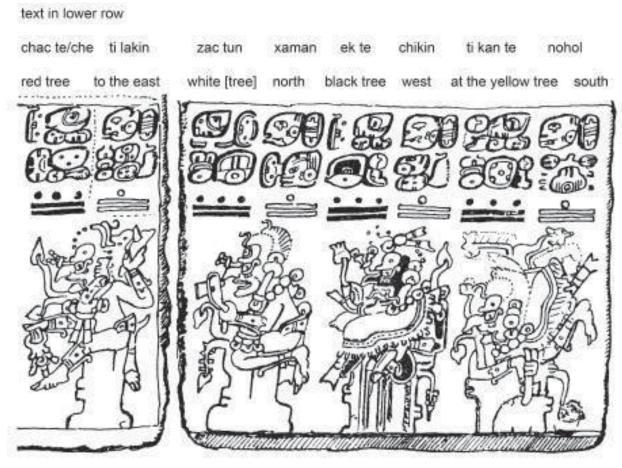


Figure 12.4. Pre-Hispanic trees of the perimeter directions, Dresden Codex, pages 30c-31c. From Villacorta and Villacorta (1933) 1977.

two principal deities of the scene. This motion occurs over the 365-day haab, the interval that is the closest approximation of the tropical year of 365.2422 days that is possible in a mathematical system without fractions. I see the second deity, the Moon Goddess, as the probable patroness of the 260-day tzolkin, and I have argued that the *Madrid* 76–75 illustration shows the religious sanction of world directions and also of Calendar Round dates, which consist of a tzolkin date combined with a haab date. Where previous scholars have treated only the tzolkin as a religious cycle, I have proposed that the haab held equal religious significance.

In Yucatán the yaxcheel cab, a sacred tree of abundance, was thought to occupy the precise center of the earth, and its branches were believed to provide access to thirteen successively higher levels of the heavens (Thompson [1950] 1960, 71). As is discussed further in the following section, the tree that marked the center sector had four companion trees representing the perimeter directions. Perhaps the form that shelters the

two figures in the center of the Madrid 76-75 diagram was meant to show this tree, but it is, in my opinion, so stylized that the interpretation is not certain. Nevertheless, we know that directionally oriented trees constituted an important pre-Hispanic theme, as is painted in a series of panels on pages 30c-31c of the *Dresden Codex*. In these scenes the deity Chac appears in the tops of a series of trees (che or te in Yucatec; fig. 12.4). The hieroglyphic text written in the top sections of the panels provides a rotation of the glyphs for the directions and the names of the trees, with references to the colors of the perimeter directions (Thompson 1972, 102-3; for a photographic facsimile of the manuscript, see Dresden Codex 1975). Although the center tree is not mentioned explicitly in this case, the creation of the peripheral sectors assumes the existence of this position. The use of trees to symbolize the world directions continued into the period following European contact and has been reported by twentieth- and twentyfirst-century observers.

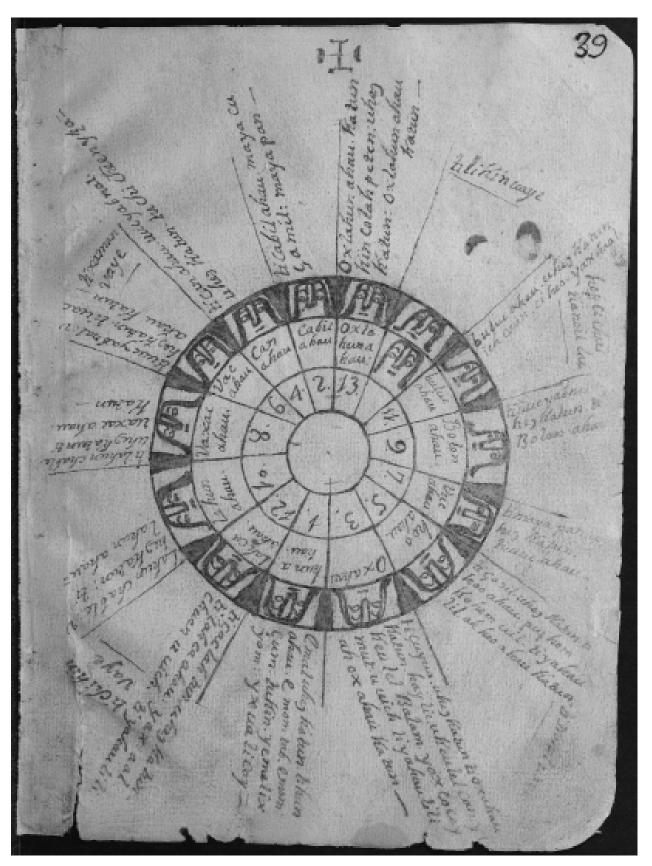
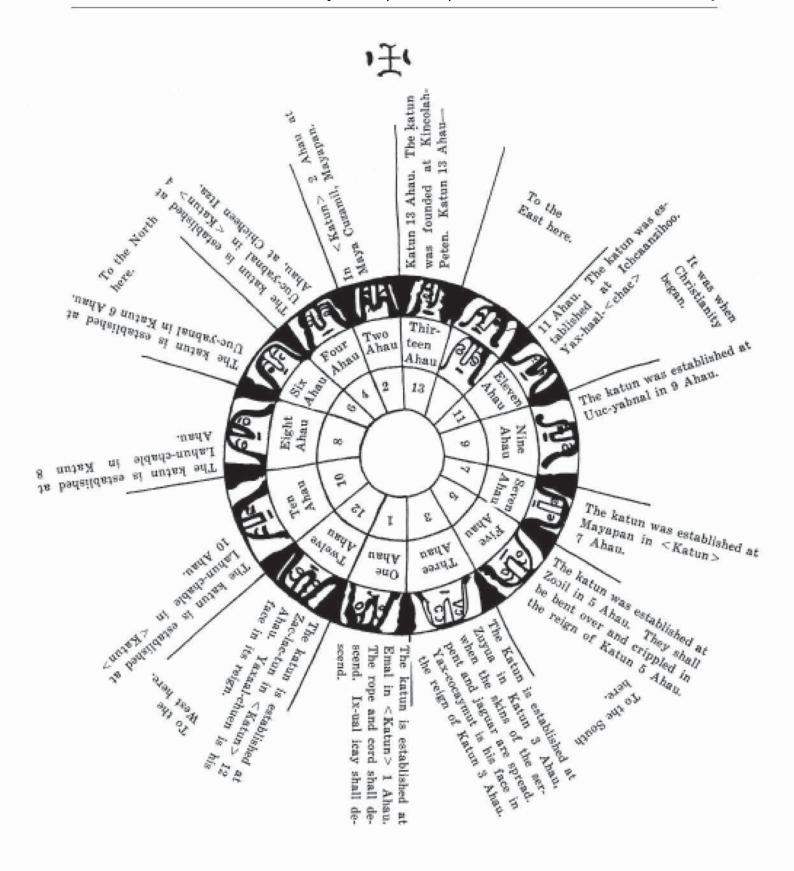


Figure 12.5. A katun wheel, Book of the Chilam Balam of Chumayel: (a) (left) photographic reproduction, courtesy of Princeton University; (b) (right) transcription, based on Roys 1933, 132.



Postconquest Survival of the Directional Concepts

After the Spanish gained dominance in the Yucatán Peninsula, their drive to extirpate indigenous religion included the destruction of as many codices as possible. Despite this, some of the ancient beliefs survived in compilations of ritual, historical, literary, calendrical, and astronomical knowledge that also included material from European sources. These works, usually named for their towns of origin, are known as the Books of Chilam Balam.⁷ They preserve archaic language features, and sections of the books appear to have been transcribed from old hieroglyphic texts. For example, Barrera Vázquez (1939, 75) commented on a phrase in one of the passages in part 2 of The Codex Pérez and the Book of Chilam Balam of Maní: "tin hokzah ti uooh." His translation into Spanish means that the text was "taken from hieroglyphs."8 The sources have long been regarded as the successors to the preconquest codex tradition (Seler 1904, 329; Thompson [1950] 1960, 34).

The Book of the Chilam Balam of Chumayel (1775-1800) incorporates relatively little European content. Roys ([1933] 1967, 4-7) observed that although the surviving copy was signed in 1782 by Juan José Hoil, the language relates it more to the seventeenth century than the eighteenth. The pre-Hispanic directions figure prominently in the Chumayel compilation, as is shown by sections of the text and a diagram on page 72 (following the pagination of Gordon 1913; fig. 12.5a, b). This is an illustration of a katun wheel that shows the recycling sequence of periods of seventy-two hundred days (about twenty years). The katuns are characteristically named for the tzolkin day on which they end, which is always Ahau. Because of the structure of the calendar, the number linked with each day Ahau decreases by two places as the succession continues, which creates the series of coefficients that in nearly all of the surviving katun wheels begins with 11 and is followed by 9, 7, 5, 3, 1, 12, 10, 8, 6, 4, 2, and 13, recycling at 11 Ahau. The word ahau means "lord," and the faces placed in the outer ring of the wheel represent the lords of the katuns.10 Although the format of the Chumayel example is circular, not square, changes in the directional segments correspond with the positions of the solstice sunrise and sunset corners in the Madrid 76-75 scene, and the divisions radiate from a clearly marked center. Roys ([1933] 1967, 132) commented that while the succession of the katuns in the Chumayel wheel follows the normal rotation to the right, the sequence of the directions is counterclockwise. This sequence places east at the top.

The survival of the solar-based directions during the postconquest era is also shown by a map from the colonial town of Maní. As the preconquest political capital of the Xiu people, the settlement had previously been a major population center.11 In 1557 a map of the area was created as part of the ritual survey that established the boundaries of the surrounding Xiu province. The original document was housed in the famous archive in Maní that was maintained well into the colonial period. The 1557 map has not survived but is known through several copies. Probably the most reliable of these is the version that was carefully made for John L. Stephens when he visited the town in the nineteenth century. It was reproduced from an image that might have been the sixteenthcentury item because it was part of a very old book (Stephens [1843] 1963, 2:171-75). The resulting 1843 publication preserves the basic structure of the solar directions in the *Madrid Codex*, with Maní featured as the central place. The map has lines, possibly representing roads, that lead away from the town toward the cardinal points and the approximate locations of the solstice corners of the region (Paxton 2009).

Other documents from the Maní archive that no longer exist are now known from copies made in the nineteenth century by Juan Pío Pérez. In creating his compilation, The Codex Pérez and the Book of Chilam Balam of Maní (Craine and Reindorp 1979), he organized the information into three sections. Unfortunately, the locations of the materials being copied are not always clearly stated. One passage in the first section bears a notation describing its source as a notebook in the Maní archive, while the entire second section is also known to have come from there, and the third was taken from various, largely unspecified sources.12 The association of part 2 with Maní is certain because of the statement, "This is the end of the book titled Chilam Balam that is preserved in the village of Maní, held by the Master of the Chapel" (Craine and Reindorp 1979, 140).

The continued importance of the directional trees in Maní during the Colonial period is indicated by a passage in part 2 that describes how after a previous destruction of the earth.

the red imix tree was erected, for it is one of the supports of heaven and the sign of the dawn. . . . Kan Xib, the father, planted the white Imix tree to the north. . . . The black Imix tree was planted to the

west of Petén.... The [yellow breasted] *mut* planted the yellow Imix tree to the south... The green Imix tree was planted in the middle of the earth." (Craine and Reindorp 1979, 119)¹³

The green *imix* tree is the functional equivalent of the yaxcheel cab. Although colonial accounts do not directly associate it with a particular kind of tree, subsequent scholarship has led to the conclusion that it was the ceiba (*Ceiba pentandra*) or *yaxche*' ("first tree" or "principal tree"; Thompson [1950] 1960, 71). Alfredo Barrera Marín, Alfredo Barrera Vázquez, and Rosa María López Franco (1976, 311–12) mention that in Yucatán the *yaxche*' is cut and transported ceremonially to be planted in in towns, in the centers of bullrings. The modern Maya prefer young ceibas that still have very green trunks for this purpose. These researchers emphasize that the word for ceiba is *yaxche*' (principal tree), not *ya'axche* (green tree), which nevertheless suggests a play on words in the conception of the ritual.

The colonial universe constructed around the directional trees provided a setting for historical records that became crucial prophecies. For example, in the Chilam Balam of Maní, the record of Katun 11 Ahau states that the katun is to the east. "We shall pray for bread from heaven, for there shall be death from starvation, and we will be scattered throughout the world. There will be great weeping; there will be no one who does not weep" (Craine and Reindorp 1979, 77). This prophesy fostered the expectation of famine approximately every 256 years, when subsequent katuns with the same numerical coefficient occurred. Naturally, this outlook also shaped history. When the Spanish missionaries Bartolome de Fuensalida and Juan de Orbita first attempted to introduce Christianity at Tah Itzá, they were told that the current katun was 3 Ahau and that the age during which they were to abandon the adoration of their gods (8 Ahau) had not yet arrived. As Katun 8 Ahau approached, Father Andres de Avendaño y Loyola, who was familiar with the Maya calendar and the prophecies, came to the settlement. Using this knowledge, he may well have persuaded the leaders to surrender in 1697 to the approaching Spanish military forces with minimal resistance (Barrera Vázquez and Morley 1949, 80-82).14 Surely powerful Maya religious and political figures must have previously used their own specialized expertise in these systems to maintain their positions.

Other twentieth- and twenty-first-century records show that the system of the solar directions is still

commonly applied in Yucatán. It is, for example, crucial to the perceptions of life in the Maya community of Yalcobá (located about 40 miles east and slightly north of Chichén Itzá), being replicated at every level of spatial organization and prominent in ritual structure as well, as John Sosa (1985) has so clearly shown. Elsewhere in Yucatán, Marianne Gabriel (2004a, 2004c, 74-75) has observed over a period of twenty years that ritual altars have elements that symbolize the cosmos. They have markers at the center and the four corners (intercardinal points), which means they reflect the solstice corners of the universe. Gabriel (2004b, 427) also notes that it is common in modern Yucatán to conclude religious ceremonies with offerings to the four perimeter directions that are made by participants placed at the corners of the altar.15

The foregoing information has shown that the five solar directions, symbolized by trees, were and are a major cultural force in Yucatán. These sectors are obviously related to the calendar and the historical records/ prophecies that govern survival and other essential concerns of daily life. The solar directions also influenced changes in religious and political leadership (as I will discuss further). More specifically, the importance of these divisions of the cosmos, their related trees, and predictions for the katuns was recognized at Maní during the Colonial period. Hence, it is likely that the scene copied there for López de Cogolludo's *Historia* followed the same conceptual outlook.

THE LÓPEZ DE COGOLLUDO IMAGE AND ITS INTERPRETATION

The illustration that was published in the López de Cogolludo history in 1688 (see fig. 12.1), over a century after the founding of the Spanish capital in Mérida in 1542, is based on an earlier prototype. López de Cogolludo ([1688] 1957, 130, 132) commented that the men shown around its edges were identified in a document that he had found, which had been written by an Indian, and that an Indian had made the painting in Maní that he reproduced. The López de Cogolludo version probably dates from around 1647–1656. Sylvanus Morley (1920, 472n3) called attention to page 127 of the *Historia*, where López de Cogolludo wrote, "I went in this year 1655 personally [to Campeche]," and the opinion of Molina Solís is that it was written in 1656. Rubio Mañe (in López de Cogolludo [1688] 1957, facsimile,

lxiii) cited a statement contained in the work that it had been begun in Sotuta in 1647.

In 1841–1842, John L. Stephens and Frederick Catherwood traveled extensively in the Yucatán Peninsula, including to Maní, as mentioned previously. There they saw an old painting that must have been the source mentioned by López de Cogolludo. Stephens described how they were first shown a copy of the published 1688 history that was clearly valuable, as it had been wrapped in a protective covering. Then the Maya produced the original image, made on cotton cloth that they rolled out onto the floor for viewing. Only one image in the López de Cogolludo *Historia* conceivably has any Maya content. The account of the experience by Stephens provides no insight regarding the accuracy of the printed illustration, and he followed López de Cogolludo's opinion concerning its meaning (Stephens [1843] 1963, 2:169).

Historical Explanations

The earliest explanations of the 1688 illustration were strictly historical. López de Cogolludo remarked that the original picture had a date written in European notation. The number was 36, which he did not reproduce because he was convinced that the reference must be to the year 1541, not 1536. In his view (López de Cogolludo [1688] 1957, 130-32), the scene portrays the treacherous murders of some emissaries of the tutul xiu, the highest ruler of the Xiu political unit centered at Maní, that had taken place near the town of Sotuta. These murders were partly the result of a long-standing enmity with a Sotuta group, the Cocom. 16 The victims of the massacre had on January 23, 1541, accompanied the principal Xiu ruler when he had gone to render allegiance to the Spanish conquerors. After the party had spent sixty days with the Europeans, the tutul xiu promised he would send his companions to areas outside his realm to persuade those entities to surrender as well. The diplomatic missions soon began, with plans for delivery of the message at the Cocom capital in Sotuta.

When the Xiu ambassadors arrived in Sotuta, they were taken to the nearby retreat of the local ruler, located at Otzmal, for hunting and other festivities. Then, at the end of four days, they were beheaded by their hosts. According to López de Cogolludo, the murders had taken place at the conclusion of the final banquet, which had been held under a large tree known in Maya by the name *yàa* and in Spanish as the *zapote*. Purportedly, this was the tree featured so prominently in the López de

Cogolludo illustration. Because he knew the visits to Maya towns by Xiu emissaries had taken place in the year 1541, López de Cogolludo regarded the reference to [15]36 on the original painting as a simple error that should not be perpetuated. He interpreted the head with the protruding arrow (in the upper right) as the lone surviving Xiu diplomat, who had been blinded and returned to his home territory to recount what had happened.

From the information presented by López de Cogolludo, it seems doubtful that the illustration under discussion is a diagram of the Maya directions. First, the location of the tree is described as outside the main settlement of Sotuta. Secondly, as noted, the imix tree that symbolizes the center sector of the universe in the Book of Chilam Balam of Maní can be identified as the ceiba, or yaxche', not the zapote. However, when spoken, this Maya word could easily have been recorded by a Spaniard as *ya'che*, or zapote tree, and subsequently repeated.¹⁷ The identification cannot be clarified from the representation of the tree because, as mentioned earlier, this image was highly influenced by European artistic conventions, and it is too generalized. When Stephens and Catherwood visited Maní, they met residents who were certain they knew the precise location of the zapote tree mentioned by López de Cogolludo. Yet they could well have become convinced by their treasured copy of his Historia that they should look for a tree of this type and then deduced which one it must have been.

In reviewing the implications of López de Cogolludo's image and its accompanying explanation for the correlation of Maya and European calendars, Morley (1920, 472-73, 478-87) described another massacre of Xiu leaders had occurred in Otzmal in 1536. He had found the association of this event with the place where it transpired in the Xiu family papers, and he also cited records of its occurrence in several other sources, including the Relación de las cosas de Yucatán de Diego de Landa. These murders had taken place when Xiu leaders requested safe passage through Cocom territory in order to make a pilgrimage to the Sacred Cenote at Chichén Itzá. They desired to sacrifice slaves there in an effort to end a drought that was so extreme that they thought their request would be undeniable. The Cocom granted the permission and provided lodging for the members of the Xiu expedition in a single building, which they then burned with the guests inside. Anyone who escaped the fire was killed outside.

Morley (1920, 480–81) was convinced that any historical content in the illustration in the *Historia* must refer to







Figure 12.6. Three interpretations of Ah Kin Chi: (a) (top left) Ah Kin Chi, identified by López de Cogolludo ([1688] 1957, 130) as a lieutenant of the Tutul Xiu in Maní. Detail from Gates 1932, 4. (b) (top right) Ah Kinchij Cobaa as regent of Katun 13 Ahau in the Book of Chilam Balam of Kaua. Drawn from Bricker and Miram 2002, 313 by the author. (c) (bottom left) Kinchil Coba as regent of Katun 13 Ahau in The Codex Pérez and the Book of Chilam Balam of Maní. Drawn from Craine and Reindorp 1979, 86 by the author.

the massacre of the religious mission to the Sacred Cenote and that López de Cogolludo was mistaken in changing the date from 1536 to 1541. However, as Victoria Bricker and Helga-Maria Miram (2002, 306-7) comment, the López de Cogolludo illustration probably presents a combination of both historical events. The head in the upper right that López de Cogolludo interpreted as the blinded messenger who was spared to tell the story of the killings is also shown as dead, which would reflect the account of the earlier incident that no one survived. Morley's (1920, 482) comparison of all known verbal descriptions of both massacres established that the histories also overlap: a napot xiu, in the upper left of the López de Cogolludo illustration, is listed as having been killed on both occasions. The first explanations by non-Mayans obviously imposed European linear history on the Maya perception, which views history as cyclical.

Linking History with the Katun Cycle

The visual elements of the illustration provide greater insights into its meaning than the López de Cogolludo commentary, as is evident from Morley's review of the historical significance, which called attention to another possible line of meaning carried by the image. Morley (1920, 482) stated that as early as 1882, Daniel Brinton had suggested a connection with Maya katun wheels and that in recent conversations William Gates had definitely established the association. When that analysis was published, Gates (1932) showed that the names of the men written in the López de Cogolludo image closely resemble the sequence of names for katuns in the complete series of related prophesies on pages 166-71 of the Book of Chilam Balam of Kaua. Each of these names is accompanied by an illustration of the head of a man wearing a crown, and the heads are depicted as alive, with open eyes. Nevertheless, the forms are clearly related to the 1688 print, as a comparison of the portraits of López de Cogolludo's Ah Kin Chi with Ah Kinchij Cobaa in the Kaua shows (fig. 12.6a, b). The shaft of the arrow reputedly used to blind the diplomat appears in both instances. While the arrow does not make contact with the eye of the man in either depiction, the fletching is unambiguous in the López de Cogolludo representation. In the Kaua head, the motif is presented as a decoration for the crown of the Ahau lord. Thus, the meaning is easier to interpret from the 1688 version.

Gates found repetitions of the same katun theme in the *Book of Chilam Balam of Chumayel*. Additionally, Morley (1920, 482–83) recognized that it is incorporated in the *Book of Chilam Balam of Maní*. The latter illustrates the head of Kinchil Coba, with the arrow protruding from his eye (fig. 12.6c), and the general similarities in the series are such that Morley concluded that the *Kaua* and *Maní* series must have been copied from López de Cogolludo or vice versa or that all three versions were copied from the same original. Because of these connections, Morley decided that the López de Cogolludo illustration fundamentally represents a katun wheel in which the numbers that should identify each of the periods have been replaced by names of men.¹⁸

Philip C. Thompson's (1999) research in Tekanto, in north-central Yucatán, suggests another level of connection between historical figures and the Ahau lords of the katun wheels. In my opinion, his study shows how a katun wheel that was organized to reflect the solar-based directions, like the previously mentioned example in the Book of Chilam Balam of Chumayel (see figs. 12.5a and 12.5b), could have influenced the transfer of religiously sanctioned political power. Thompson's work continued the analysis of the connection between calendar and political organization that had been previously published by Michael Coe (1965), which is based on the ca. 1566 Relación de las cosas de Yucatán. This source preserves a detailed description of the rituals that concluded one haab and began the next. It is apparently a relatively unacculturated record of the practices of the late pre-Hispanic period.

Coe (1965, fig. 1) used the facts in the *Relación* to diagram the community into directionally oriented social spaces, with a center area and four perimeter precincts. The responsibility of conducting ceremonies rotated among representatives of the latter, whom Coe (1965, 106) identified as the annual holders of combined ritual and political power. Not surprisingly, his interpretation of the spatial divisions of the community and the enactment of the rituals resembles the map of the world directions on pages 76–75 of the *Madrid Codex*. Coe's diagram features the cardinal points rather than the solstice corners, but I (Paxton 2001b, 16–17) see this as a likely result of the tendency of translators to render the phrase "las cuatro partes del mundo" as "the cardinal points."

Following Coe's approach, P. Thompson linked the succession of office holders in Tekanto, Yucatán, to the world directions. Based on other lines of thought, he also proposed an alternate diagram of the division of the space that emphasizes the solstice corners rather than the cardinal points (Thompson 1999, fig. 8-2).¹⁹ The research

focused on Tekanto because of an unusual circumstance there: careful documentation of the succession of its leaders had been preserved over a long period. Thompson concluded that the terms when various colonial officers held their positions could be related to the rotation around the perimeter directions of the haab days that began the new Maya years. Among his examples was the eighteenth-century use of a katun-like period that was applied to filling the office of the batab, who was usually the highest-ranking local ruler. He was second only to the halac uinich, the person who controlled multiple settlements beyond the level of the individual community. Thompson (1999, 264) determined that a batab typically served for a katun, and if the office became vacant the successor only completed the remainder of his predecessor's term. So far as I am aware, the records of the transfers of office at Maní have not been studied to determine whether the same process was followed there, if such records exist at all. The Tekanto practice does not definitely relate the katun lords in the López de Cogolludo figure to the four horizon directions. Nevertheless, it does show that this possibility is more than a purely theoretical construct.

As Gates demonstrated, the portrait heads in the López de Cogolludo copy are recognizable as a katun wheel because of their similarities to the content of katun histories found in some of the Books of Chilam Balam. This suggests that perhaps these related works preserve additional information that can be used to locate the solstice corners in the *Historia* illustration. A comparison of the López de Cogolludo image and the accompanying description with the Maní katun prophecies and the information in the Books of Chilam Balam of Chumayel and Kaua does show more about the nature of these relationships (table 12.1 and appendix). However, the surviving texts do not support a reconstruction of that aspect. Nevertheless, some perimeter directions are mentioned in all of these colonial Maya sources. It is of particular interest to this discussion that the section of the Chilam Balam of Maní that is closely related to the López de Cogolludo illustration indicates the continued importance of the concept in the community.²⁰

A copy of López de Cogolludo's list of names that accompanies the illustration was inserted between pages 84 and 85 of the copy of the *Maní* manuscript in the Peabody Museum at Harvard University.²¹ A comparison of this list with the *Maní* and *Kaua* information (table 12.2) establishes that the beginning of the *Maní* cycle coincides with the usual Maya starting point (Roys

[1933] 1967, 132n1). However, the *Kaua* cycle was shifted to begin with the first name on the López de Cogolludo and *Maní* lists, that of the man who was one of the highestranking members of the Xiu ambassadorial party. All of the lists also follow a Europeanized reading sequence because they are not arranged continuously with respect to the portrait heads of the Cogolludo illustration; hence, they do not reflect the traditional Maya directions suggested by the image.

Other Colonial Maya Diagrams of Time

Another line of investigation that I have followed is a search of the surviving colonial Maya diagrams of time and space for links with the solar directions. One of these is in the Book of Chilam Balam of Maní (Craine and Reindorp 1979, 97, fig. 1). The obvious purpose of the illustration is to relate the pre-Hispanic calendar to the traditional Maya directions. It is circular, with a marked center and tabs along its circumference to indicate the cardinal points. The interior of the wheel is divided into wedges that contain images of the thirteen katun lords and also names of the days that build the 260-day tzolkin cycle. The tabs at the cardinal points are labeled with the names of the days in the same cycle that correspond to the beginning of the 365-day haab, the year bearers. The Book of Chilam Balam of Kaua similarly has a calendar wheel that associates the year bearer days and the thirteen katun lords with the world directions (Bricker and Miram 2002, 103, figures at the bottom of the page). In this case the center sector has lines that radiate outward to divide the periphery into the four directions at the positions of the solstice sunrises and sunsets.

Pío Pérez copied another directionally oriented katun wheel in Ixil that was part of the *Book of Chilam Balam* in that community (Craine and Reindorp 1979, 176, fig. 3). In the Ixil version (Caso Barrera 2011, fol. 21r, 157), the image consists of two closely spaced wheels with teeth around their exteriors, which implies that they should mesh like gears. The large upper wheel has a carefully drawn center. The periphery shows only twelve of the thirteen heads of the katun lords, although the outline of the thirteenth is sketched in pencil and the number 13 is written below an adjacent head. ²² The names of the year-bearers are written in a repeating band near its outer edge. It is the lower of the meshing wheels, which focuses on the year bearers, that directly illustrates the world directions. The word for east appears at its top, and the

Paxton Paxton

Table 12.1. Directional orientations of katun prophecies in the Books of Chilam Balam of Maní, Chumayel and Kaua

MANÍ TEXT (CRAINE AND RAINDORP 1979, 77–88)				CHUMAYEL KATUN WHEEL (ROYS [1933] 1967, 132)		KAUA TEXT (BRICKER AND MIRAM 2002, 307–17)
	Dir	Prophecy	Dir	Prophecy	Dir	Prophecy
			Е	To the east here (Roys [1933] 1967, 132n1: A cross is set above Katun 13 Ahau, but 11 Ahau is usually consid- ered to be the first of the series; it be- gins with the day 1 Imix.)		
	Е	The first Katún, to the east, is Katun 11 Ahau .	S	11 Ahau		In 11 Ahau the seat of the katun is Mérida.
		Ichcaanzihó will estab- lish Katun 11 Ahau .		11 Ahau. The katun was established at Ichcaanzihoo.		
Yaxal Chac its counte- nance			Yax-haal-[chac]		Yaxal Chac is its face. (p. 314)	
		Chrisitanity came to us. (p. 77)		It was when Christianity began.		
		Ucil Abnal will establish the Katun 9 Ahau. (p. 79)	S	The katun was established at Uuc-yabnal in 9 Ahau .		Uuc Yabnal is the seat of the katun in Katun 9 Ahau . (p. 314)
		Mayapán will establish Katun 7 Ahau . (p. 80)	S	The katun was established at Mayapan in [Katun] 7 Aha u.		Mayapan is the seat of the katun in 7 Ahau.
						Ek Chuuah is its face during its reign. (p. 315)
		Zodzil will establish a Katun 5 Ahau. (p. 80)	S	The katun was established at Zodzil in 5 Ahau .	S	Zodzil is the seat of the katun in 5 Ahau .
				They shall be bent over and crippled in the reign of Katun 5 Ahau .		It will be hunched. It will limp perhaps.
				To the South here		It is in the south that it must bend. (p. 316)
		Zuyua will establish a	W	The Katun is established at Zuyua in		Zuyua was the seat of the
		Katun 3 Ahau in which the tiger changes his skin.		Katun 3 Ahau , when the skins of the serpent and jaguar are spread.		katun in 3 Ahau when the skin of a snake was spread out.
		Yaxcocahmut will be the countenance of Katun 3 Ahau during its reign. (p. 80)		Yax-cocaymut is his face in the reign of Katun 3 Ahau .		Yax Cocah Mut was the face of the reign of Katun 3 Ahau . (p. 307)
		Emal will establish a Katun 1 Ahau [and Amaite Kauil will be its countenance].	W	The katun is established at Emal in Katun 1 Ahau .		Emal was the seat of the katun in 1 Ahau .
		The cord descends (p. 81)		The rope and cord shall descend. Ix-ual icay shall descend.		The rope will have descended; the cord will have descended. (p. 308)
		Zaclactun, Mayapán will establish a Katun 12 Ahau.	W	The katun is established at Zac-lac-tun in [Katun] 12 Ahau.	W	In 12 Ahau
		[Yaxhal Chuen will be its countenance during its reign.] (p. 82)		Yaxaal-chuen is his face in its reign.		Yaxal Chuen is its face during its reign.
				To the West here		It is in the west that it must bend. (p. 309)

MANÍ TEXT (CRAINE AND RAINDORP 1979, 77–88)		С	HUMAYEL KATUN WHEEL (ROYS [1933] 1967, 132)	KAU	UA TEXT (BRICKER AND MIRAM 2002, 307–17)
	Lahun Chablé will establish a Katun 10 Ahau . (p. 82)	N	The katun is established at Lahun-chable in [Katun] 10 Ahau.		Lahun Chable is the seat of the katun in 10 Ahau. (p. 310)
S	Lahun Chablé will establish, to the south, a Katun 8 Ahau . (p. 83)	N	The katun is established at Lahun Chable in Katun 8 Ahau .		Lahun Chable is the seat of the katun in 8 Ahau . (p. 310)
	Uucil Abnal [Chichén Itzá] will establish a Katun 6 Ahau . (p. 84)	N	The katun is established at Uuc-yabnal in Katun 6 Ahau .	N	In 6 Ahau Uxmal is the seat of the katun in 6 Ahau .
			To the north here		Kinich Kakmo is its face in the sky. It is in the north that it must bend. (p. 311)
	Uucil Abnal [Chichén Itzá] will establish a Katun 4 Ahau . (p. 85)	E	The katun is established at Uuc-yabnal in Katun 4 Ahau , at Chichén Itzá.	S	Uuc Yabnal is the seat of the katun during Katun 4 Ahau . At Chichén, Uuc Chanal is its seat in the south. (pp. 311–12)
	Zaciyapan will establish Katun 2 Ahau.	Е	In [Katun] 2 Ahau at Maya Cuzamil, Mayapán		May Cu Valladolid is the seat of the katun in 2 Ahau . (p. 312)
	Zaclactun, Mayapán weeps in this Katun. (p. 86)				
	Kinchil Coba will establish a Katun 13 Ahau . (p. 86)	E	Katun 13 Ahau. The katun was founded at Kincolah-Peten. Katun 13 Ahau—	Е	Kinchil Coba is the seat of the katun in 13 Ahau.
					Itzam Na and Itzam Tzab are its face during its reign.
					It is in the east that this must bend. (p. 313)
	When the Katun 13 Ahau ends, there will begin the Katun 11 Ahau (p. 87)				
	When one series of 13 Ahau katuns as they are called, ends, another se- ries runs. The effigies of the Ahau Katuns are painted on the wheel of				
	the katuns. One of them began when this was written, and when this 8 Ahau ends another Ahau begins. (p. 88)				

Note: There are insertions in the Kaua manuscript, apparently late additions because they are in a different script, that specify the length of the katun as twenty-four years (Bricker and Miram 2002, 307n1762). The Maní cycle is also built around twenty-four-year katuns, despite the statement at the beginning, "There are thirteen Ahau- Katuns of twenty years each" (Craine and Reindorp 1979, 77). The twenty-year katun is the pre-Hispanic construction that is now generally accepted by researchers. Craine and Reindorp (1979, 79n67) comment that the compilation by Pío Pérez is confusing because shifts between twenty- and twenty-four-year intervals are common.

Table 12.2. Ahau lords: A comparison of information from López de Cogolludo with *The Book of Chilam Balam of Maní* and *The Book of Chilam Balam of Kauaw*

COGOL- LUDO ILLUSTRA- TION		COGOLLUDO TEXT		ADDED MANÍ LIST		MANÍ PROPHE- CIES		KAUA PROPHE- CIES	
(Cogolludo [1688] 1957, 2:133)		(Cogolludo [1688] 1957, 2:130–31; translations by the author) Adoration of the Holy Cross of the Spaniards by Tu- tul Xiu and those accompanying him on January 23, 1541. Based on "names that I found in an ac- count written by an Indian."		(Craine and Reindorp 1979, 77–78) [dated January 23, 1541]		(Craine and Reindorp 1979, 77–86)		(Bricker and Miram 2002, 307– 17)	
SEQUENCE	LORD	SEQUENCE	LORD	SEQUENCE	LORD	SEQUENCE	LORD	SEQUENCE	LORD
1	Ah Na Pot Xiu	1	Ah Nà Poot Xiu, son of Tutul Xiu, lieutenant of Tutul Xiu in the capital of Maní	1	Ah Na Pot Xíu, son of Tutul Xíu	5	3 Ahau	1	3 Ahau
							Ah Napot Xiu		Ah Napot Xiu
		2	Ah Ziyah, governor-priest, lieutenant of Tutul Xiu in the capital of Maní	2	Ah Ziyah, governor- priest				
2	Ah Kin Chi	3	Ah Kin Chi, lieu- tenant of Tutul Xiu in the capital of Maní	3	Ah Kinchi, lieutenant of Tutul Xíu, priest	6	1 Ahau	2	1 Ahau
							Zoon Ceeh		Zon Ceh
3	Yiban Can.	4	Yí Ban Can, gov- ernor of the town of TeKit	4	Yibancan, governor of Tekit	7	12 Ahau	3	12 Ahau
							Ahau Tuyú		Ahau Tuyu
4	Pacab	5	Pacàb, governor of Oxkutzcab	5	Pacab of Oxkutzcab	8	10 Ahau Xul Kum Chan	4	10 Ahau Xul Kum Chen
5	Kan Caba.	6	Kan Caba of Pan- abchen, which is abandoned today	6	Kancaba of Panabchen	9	8 Ahau	5	8 Ahau
			abandoned today				Tucuch		Tucuch

COGOL- LUDO IL- LUSTRA- TION		COGOLLUDO TEXT		ADDED MANÍ LIST		MANÍ PROPHE- CIES		KAUA PROPHE- CIES	
6	Kupul	7	Kupul of Zacalum	7	Kupul of Sacalum	10	6 Ahau	6	6 Ahau
							Cit Couat Chumayel		Cit Couat Chumayel
7	Nauat	8	Nauat of Teab	8	Nauat of Teab	11	4 Ahau	7	4 Ahau
							Uluuac Chan		Ul Uac Chan
8	Uluac Chan	9	Vluac Chan Cauich, it doesn't say from where	9	Uluac Chan of Cauich	12	2 Ahau	8	2 Ahau
							Nauat		Nauat
9	Cit Couat Chumayel	10	Zon Ceh of Pencuyut	10	Zon Ceh of Pencuyut	13	13 Ahau	9	13 Ahau
							Kinchil Coba		Ah Kin Chi Coba
10	Tucuch.	11	Ahau Tuyu of Mùna	11	Ahau Tuyu of Muna	1	11 Ahau	10	11 Ahau
							Yiban Can		Yiban Caan
11	Xul Cumche.	12	Xul Cumche of TipiKàl	12	Xulcum Che of Tipikal	2	9 Ahau	11	9 Ahau
							Pacab		Pacab
12	Ahau Tuyu	13	Tucuch of Màma	13	Tucuch of Mama	3	7 Ahau	12	7 Ahau
							Kancaba		Kan Caba
13	Zon Ceh	14	Zit Couat of Chumayel	14	Zit Couat of Chumayel	4	5 Ahau	13	5 Ahau
							Kupul		Kupul

sequence of north, west, and south follows. Its center sector has a Maltese cross-like shape with four additional lines radiating toward the solstice corners.

Yet another katun wheel is preserved in the *Relación* of Diego de Landa (Tozzer 1941, 167). It has a similarly well delineated center, and around its perimeter the thirteen Ahau lords appear, with the number to build the appropriate sequence correctly written beneath each. East, designated by a cross, is once again at the top, but there are no other indicators of the directions. The *Book of Chilam Balam of Chan Kan*, also known as the *Book of Chilam Balam of Chan Cah*, has a diagram that only shows the world directions of the year-bearers (Hires 1981, 355; Calderón and Grupo Dzíbil 1982, 123). Its center is not explicitly indicated, but the cardinal points are.

Pío Pérez said he copied another drawing of the year-bearer cycle from an old notebook in Ixil (Craine and Reindorp 1979, 175, fig. 2). This figure is identified as a "Wheel according to Landa." Here again the center is delineated, and the year-bearer days are linked to the cardinal points. However, this example differs from the other Ixil calendar wheel in that it connects the directions with different tzolkin days. For instance, Kan is shown with south, which follows Landa's account, but as Alfred Tozzer (1941, 139n651) explained, the usual association is with east. Another unique feature of this wheel is that it places north at the top instead of east.

So far as I am aware, no other calendar wheels survive from the Colonial period or the early period of Mexican independence. Although the number of examples is small and contain varying representations, the directions constitute a major theme in all of these colonial images of time, which further sustains the notion that the world directions shaped the indigenous source copied in the López de Cogolludo illustration.

The Tree Motif and the Directions of the Cosmos

Previous research on the meaning of the illustration in López de Cogolludo's *Historia* has focused on the historical interpretation of the Ahau lords, without consideration of the tree depicted in its center. The form is elevated on an altar-like platform and placed in a shallow container with flames inside, imagery that strongly suggests a Maya religious meaning. The combination seems to be a Europeanized representation of ritual offerings made at the bases of trees because of its resemblance to the depiction on page 26c of the *Dresden Codex* (fig. 12.7). In the

latter scene, offerings and a flaming brazier appear at the bottom of a tree associated with south; a deity or deity impersonator tosses what are probably grains of incense or corn onto the fire.

The parallels between the representations of the ceremonies to celebrate the new years in the Dresden Codex (pages 25–28) and Landa's description of the same observances in the Relación de las cosas de Yucatán have been recognized since the late nineteenth-century investigations of Cyrus Thomas and Edward Seler, as Tozzer (1941, 137n635) states. 24 This account in the *Relación* is the same one that Coe and P. Thompson relied on to develop their diagrams of the orderly rotation of ritual and political power through the peripheral directions of the Maya cosmos. While the colonial passages pertaining to the installations of each year bearer are fundamentally repetitive, they are also rich in detail. Regarding the ceremonies for years that began on the day Muluc, which were held in the last five days of the preceding year, whose year bearer was Kan, the Maya

made an image... which they called Kan u Uayeyeb, and they carried it to the heaps of dry stone which they had raised at the southern side... they went all together to it with great devotion... the priest censed it with forty-nine grains of maize ground up with their incense, and they distributed it in the brazier of the idol and perfumed him.... The image having been incensed, they cut off the head of a hen and presented or offered it to him. This having been done, they placed the idol on a standard called *kante*. (Tozzer 1941, 139–41)

The translation of the last sentence is subject to discussion. As Tozzer (1941, 141nn663–64) remarked, the word that was translated as *standard* is *palo*, which can mean "stick" or "pole." It also commonly means tree trunk.²⁵ The quotation relies on the translation of William Gates, and Tozzer notes that the *kante* is a yellow tree of uncertain identity. Thus, it would be preferable to read the phrase as "a pole referred to as kante." This kante is likely the *kanche*' subsequently linked with the *Conocarpus erectus* L. and the *Phyllostylon brasiliensis* Capan by Barrera Marin, Barrera Vázquez, and López Franco (1976, 91). The description in the *Relación* further reminds us of the previously mentioned record of colored directional trees in the *Book of Chilam Balam of Maní*.

Although I have not yet reviewed every colonial description of Yucatec Maya ritual, the most important sources do

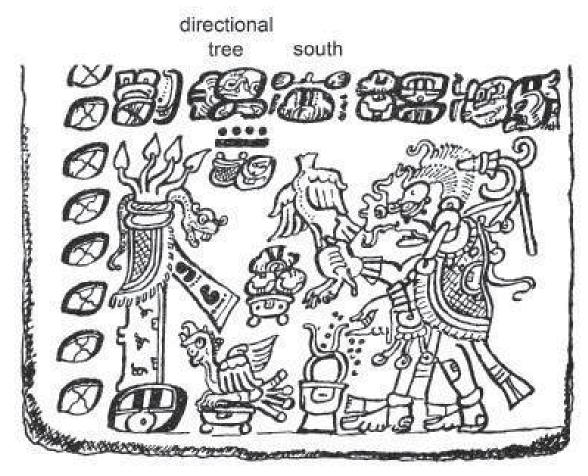


Figure 12.7. A directional tree associated with south and a flaming brazier, *Dresden Codex*, page 26c. From Villacorta and Villacorta (1933) 1977.

not mention occasions when trees were associated with braziers and offerings but not connected with the directions, and no further illustrations of incensarios near trees appear in the pre-Hispanic Maya codices. Therefore, the most plausible explanation for the image of the tree in the flaming container that was published by López de Cogolludo is that it was a symbol for the center direction.

The people who provided the information incorporated in the *Relación* are not identified directly. Tozzer (1941, 44n219) concluded that one of the informants was surely Gaspar Antonio Chi, who was also known as Gaspar Antonio Xiu and Gaspar Antonio Herrera. His father, Napuc (Ah Kin) Chi, was a priest and one of the persons killed in the 1536 massacre that is shown in the López de Cogolludo figure (upper right). Gaspar Antonio's first cousin thrice removed was Nappol Chuuah Xiu, who is thought to have been the man named as Napot Xiu in the image (upper left). Gaspar Antonio is known to have provided descriptions of the event in other documents (Tozzer 1941, 54–55n270). The 1639 *Informe contra idolorum cultores*

del Obispado de Yucatán, by Pedro Sánchez de Aguilar, mentions that the Maya informant had been raised from childhood by Landa. He was described as a truthful source from whom the bishop had "learned about the peculiarities and customs which the natives used to have and still have at present" (Sánchez de Aguilar in Tozzer 1941, 45n219). Gaspar Antonio Chi may well have advocated a directional orientation for the Maya painting of his family history that is preserved in the original López de Cogolludo illustration, one that was guided by the same world view shown by his description of the ceremonies for the beginnings of the new years and also preserved in the Book of Chilam Balam of Maní. However, while it is likely that Chi described these events to Landa, that connection is not entirely certain because the Spaniard relied on other informants as well. In any case, from its placement on an altar-like platform and the inclusion of the flaming incensario, it seems that the tree in the López de Cogolludo Xiu image must indeed signify the yaxcheel cab.

SUMMARY AND CONCLUSIONS

This investigation has focused on the Maya content of an illustration that was published in 1688 in the *Historia de Yucatán* by Diego López de Cogolludo. Its primary concern has been to determine whether the image can be interpreted as a colonial record of the sacred system of the world directions that ordered the pre-Hispanic view of time and space in Yucatán. This cultural perspective was additionally a key element of prophecies regarding the well-being and even survival of its Maya practitioners, and it figured in the rotation of religious and political power.

The preconquest philosophical outlook was built around the apparent annual motion of the sun with respect to a centrally located observer. In addition to the center, four perimeter directions were established by the locations of sunrise and sunset on the dates of the summer and winter solstices. The lines of sight projected from the center sector to the solstice corners form the five directions into an X-shaped composition. Previous researchers have realized that the X-shaped pattern of the solar directions is diagramed on pages 76-75 of the pre-Hispanic Madrid Codex as four trapezoids around the center of the cosmos. The perimeter divisions are labeled with the hieroglyphs for east, north, west, and south, which are painted at the approximate places of the cardinal points. As I have argued in other studies and summarized in this discussion, the two deities shown along the east-west axis of the Codex Madrid diagram can be seen as aspects of the Sun God and the Moon Goddess. As patrons of the two calendar cycles also represented in the scene, the haab and the tzolkin, they would have provided religious sanction for both of these components separately and in combination as Calendar Round dates. Thus, the *Madrid* illustration serves as a template for the sacred organization of space.

The influence of the X-shaped compositional framework was and is pervasive, as it is known to have survived into the Colonial period, and it has been observed in X-cacal and other twentieth- and twenty-first-century Maya communities. It was almost certainly incorporated in a 1557 map of the holdings of the rulers of Maní and can be seen in a diagram of the cycle of the katuns (approximately twenty-year intervals) in a colonial Maya source, the *Book of Chilam Balam of Chumayel*, that continues the tradition of the pre-Hispanic codices. Michael Coe has shown how early contact period Yucatec Maya used the cosmic directions to rotate the celebrations of

each new haab and the accompanying transfer of ritual and political power. Philip Thompson extended Coe's analysis to include the orderly succession of eighteenth-century political leaders in Tekanto, Yucatán, who governed for twenty-year periods. While it is not certain, it is at least plausible that the custom was also followed elsewhere in the peninsula and perhaps was an underlying assumption of the López de Cogolludo illustration. Pre-Hispanic and colonial records from Yucatán connect the world directions, marked by iconic trees, with predictions of approaching fates.

The Historia de Yucatán illustration was copied between 1647 and 1656 from a Maya painting in Maní, Yucatán. It shows, in a band that creates its shieldlike outline, thirteen political leaders who are identified by their Yucatec names. These are arranged around a tree in the center of the design, which was explained by López de Cogolludo as the site of a sixteenth-century massacre. Despite the presence of obvious European influences in the perspective of the tree's rendering, its placement suggests that it symbolizes the Maya yaxcheel cab, the ceiba tree of abundance in the center of the world directions that connected the surface of the earth with the levels of the universe rising above. But although the tree suggests the center, this meaning is not immediately obvious because the divisions of all five directions are not directly indicated and the tree is identified in the accompanying text by López de Cogolludo as a zapote, not a ceiba.

The first studies of the Maya historical content of the illustration attempted to arrange its events in a Europeanized linear sequence. Then it came to be understood as a katun wheel, a record of historical events that were also perceived as prophecies, pertaining to the repeating series of thirteen periods of about twenty years each. The placement of the thirteen portrait heads of the Maya leaders around the perimeter of the *Historia* image parallels that of the katun lords in the katun wheel of the Book of Chilam Balam of Chumayel, where the solstice corners are clearly indicated. The López de Cogolludo katun lords have also previously been linked to the katun prophecies compiled in the latter work, as well as in the Book of Chilam Balam of Kaua and the Book of Chilam Balam of Maní. While these connections do not lead to additional information that can be used to place the solstice corners in the López de Cogolludo image, they do show colonial interest in the world directions. Additionally, most surviving colonial diagrams of Maya time typically incorporate this theme, which suggests that the premise also underlies the original painting copied for the *Historia*.

As I have stated, López de Cogolludo's text identified the tree copied from the Maya painting in Maní for the illustration as the zapote where twelve of the thirteen Yucatec men in the depiction had been murdered, not the ceiba that has been recognized as the marker for the center of the universe. However, the two Maya words are similar, and it would have been easy for a Spaniard to mistakenly record the spoken word ya'che (zapote tree) for yaxche' (principal tree, ceiba tree). Since the Book of Chilam Balam of Maní mentions the importance of the trees that symbolized the five world directions, it is likely that the seventeenth-century motif in the Historia held the same significance. This interpretation is supported by the elevation of this tree on an altar-like platform and its placement in a shallow basin that contains flames. The combination resembles the flaming brazier at the base of one of the directional trees in the Dresden Codex, which was most likely used to burn grains of maize mixed with incense. The association of trees and burning braziers now seems to have occurred only in connection with the world directions.

Although this investigation has not demonstrated beyond all doubt that the illustration published in López de Cogolludo's 1688 *Historia de Yucatán* represents the center sector surrounded by the four perimeter directions, it has shown that the image most likely held this significance. The best interpretation of the tree in its center is that it is the yaxcheel cab, the sacred symbol of the center of the cosmos. The painting on cloth that López de Cogolludo's *Historia* reproduced probably depicted the sacred organization of geographic space that guided Maya fates and served as the basis for religious and political order, and the continued importance of this cosmic order well into the nineteenth century is indicated by the conservation of the original indigenous painting in Maní, as seen by John L. Stephens and Frederick Catherwood.

NOTES

- The author is known as Diego López de Cogolludo and as Diego López Cogolludo. The latter version appears on the title page of the original publication, and another form of his name, Juan López de Cogolludo, is shown on an adjacent, heavily illustrated title page.
- 2. Lizana also reported that east and west had previously been known as *dze-emal* and *noh-emal*, or great and little

- descents, which referred to the population of Yucatán in terms of the people who arrived from these directions. I (Paxton 2001b, 17, 19–23) regard his statement as a description of historical events in solar terms that is consistent with the notions of *lakin* and *chikin*.
- 3. The Dresden Codex and Codex Paris, named for the cities where they are now conserved, also lack European documentation concerning their places of origin and dates of painting. Nevertheless, they are universally accepted as preconquest. For facsimiles and introductions to the three pre-Hispanic Maya manuscripts, see Dresden Codex 1975; Codex Paris 1968; and Codex Madrid 1967. Facsimiles are also available at www.famsi.org. The authenticity of a possible fourth pre-Hispanic Maya manuscript, the Grolier Codex, has been questioned. Its place of origin is also unknown because it was purchased from an antiquities dealer. The source is named for the Grolier Club in New York, where it was first exhibited, and it is also known as Codex Saenz, after José Saenz, the collector who initially bought it. For a photographic reproduction of the manuscript, a summary of what is known of its history, and results of nondestructive tests made to investigate its authenticity, see Ruvalcaba et al. 2007.
- 4. This pagination includes both sides of the same leaf.
- 5. For the locations of this and other settlements mentioned, see map 1.6.
- 6. Figure 12.3 places east at the top, with page 76 preceding page 75. This is because the iconography of the scene relates it to a table with this orientation on two adjacent pages. From a sequence of days listed there, it can be deduced that the reading order of the four-page unit is 78, 77, 76, and 75 (Paxton 2001b, 32–33).
- See Gibson and Glass 1975, 379–87, and Paxton 2001a for an introductory overview of these books.
- 8. The corresponding text copied by Pío Pérez in Maní, which was created by Ah Kauil Chel, Napuctun, and Xupan Nauat, states that it was composed in the Villa de Salamanca (Bacalar) on 18 Zaac 11 Chuen, February 15, 1544.
- 9. Roys ([1933] 1967, 132) observed that placement of a cross outside the katun wheel normally indicates the beginning of the sequence on 11 Ahau. Here, the initial katun is 13 Ahau.
- 10. Taube (1988) has interpreted a stone sculpture of a turtle that was found at Mayapán as a pre-Hispanic katun wheel. It has 13 Ahau glyphs around the periphery of its carapace, which Taube identified as a symbol for the surface of the earth. He regards the hollow place in the center of the carving as an indicator of the center sector of the five world directions. At Mayapán painted details were frequently added to Chen Mul Modeled figure effigy incensarios, which suggests that the divisions of the perimeter directions were perhaps indicated on the turtle

sculpture by color changes. However, traces of paint are not specifically mentioned.

- 11. Roys ([1943] 1972, 175–76) provides a summary of the history of the Xiu, describing how they overthrew the Cocom rulers at Mayapán in the mid-fifteenth century before moving to Maní. This upheaval ended centralized government in the peninsula. For more on the sources that record events in the history of Mayapán, see Roys 1962. While considering these accounts, we must remember that they most likely reflect the cyclical construction discussed more fully in this chapter, not the linear sequence that underlies European history. A report on recent archaeological investigations at Mayapan is provided by Masson and Peraza Lope 2014.
- 12. One unit includes the statement that it was copied by Diego Chi, scrivener of the guild of Maní, on July 16, 1689 (Craine and Reindorp 1979, 171). Another notes that it was "copied by D. Juan Pío Pérez on October 25, 1837 in the village of Ticul, Yucatán" (Craine and Reindorp 1979, 174).
- 13. Newsome (2001) discusses Classic period sculpture at Copán in terms of these concepts.
- Barrera Vázquez and Morley quoted López de Cogolludo's 1688 Historia (494-95) concerning the influence of the katun cycle on the Itzá Maya acceptance of Spanish dominance. He recounts the visit to Tah Itzá (Tayasal, also known as Noh Petén) that was made in 1618 by Fathers Bartolome Fuensalida and Juan de Orbita, during which the head of the ruling house refused to be converted because the current katun was 3 Ahau, not yet the appointed time. Barrera Vázquez and Morley also based their interpretation on the encounter that Father Andres de Avendaño y Loyola had at Tah Itzá in January of 1696. Avendaño, who had studied Maya hieroglyphic writing, as well as the calendar and chronology, was there to make another attempt to Christianize the Itzá. The fateful Katun 8 Ahau was only four months away, according to his calculations. He reportedly convinced the ruler and the priests who were consulted to accept this interpretation and agree that they would be baptized in four months.

Jones's (1998, 172–86) examination of documents surrounding the conquest of the Itzá provides additional details of the situation. He observed that prophetic discourse regarding the arrival of Katun 8 Ahau was being widely circulated throughout most of 1695. During that year, there had been battles between the Itzá and Guatemalan Spaniards, and sometime between April and late October, the principal ruler of Tah Itzá, Ahau Can Ek', had reputedly said "that everything was true and that the time of the prophecies had already arrived, and that he wished to see our governor, since he had offered him peace." Other factors, such as the advantages of trade and a preference for overlords from Yucatán rather than Guatemala, must have also influenced this action.

Accordingly, by December 7, 1695, the nephew of the Itzá ruler is known to have been traveling to Mérida, Yucatán, with his uncle's crown. He would give it to the interim governor, Martín de Ursúa y Arizmendi (see Jones 1998, 246, for the circumstances that brought about an interim governor), as an indication of Itzá submission. The official welcome of the ambassadorial party by the Spaniards took place on December 26, and the nephew, named Ah Chan, was baptized into the Catholic faith by members of the secular clergy on December 31.

According to Jones's (1998, 176-77) synthesis, Avendaño left Mérida for Noh Petén on December 13, 1695. The purpose of his January 1696 visit there is thought to have been to secure the right of the Franciscans to convert the Maya. This would have been necessary because the documents of submission that were then being prepared in Mérida assigned the responsibility to the secular clergy, whose representatives had performed the baptism. It was the failure of the Itzá to comply with the Spanish terms stated in these sources that justified the later military conquest. Unfortunately, however, the Avendaño visit to Tah Itzá served to undermine the authority of Ahau Can Ek'. He was publicly presented as a traitor to his people when the Franciscan dressed him in colonial clothing and had him carry the colonial baton of office. It was in this state that the ruler attempted to refute those who questioned the value of submission to the Spanish and pressed for war (Jones 1998, 208-9). Even before this happened, some settlements around Lake Petén were in open rebellion, having attacked and burned part of Tah Itzá (Jones 1998, 197). This situation forced Avendaño to leave the capital secretly, at night and in fear for his life (Jones 1998, 214-15).

The military conquest of Tah Itzá occurred when the Spaniards, led by Ursúa, attacked the island at sunrise on March 13, 1697. The scene included many defenders there, as well as warriors in a large number of canoes that began to surround the Spanish vessel while it traveled across the lake. After an arrow wounded one of the Spaniards, they began to fire guns, which caused the Itzá to flee from both the island and the canoes. There were so many people swimming toward the mainland that the water was "dense with the heads of Indian men and women." Ursúa soon wrote the Spanish king that the victory was complete after only a few hours, by eight o'clock on the morning of March 13 (Jones 1998, 296–99).

Barrera Vásquez and Morley (1949, 82) noted that the Itzá defenders outnumbered the Spaniards by at least fifty to one. They attributed the Maya decision to abandon the fight after only one musket volley to their belief in the inevitability of defeat due to the influence of Katun 8 Ahau. Jones (1998, 214–16) commented that at the time of Avendaño's January 1696 visit, Ahau Can Ek' appeared to be losing control, not only of his subjects, but also of some

members of his immediate family. In Jones's view, the anti-Spanish elements gained dominance after the Maya leader helped Avendaño escape, even accompanying him for a time.

The dissention at Tah Itzá raises the question of whether the decision to send Ah Chan to Mérida on a peace mission in December of 1695, purportedly because the time of the prophecies had arrived, had political legitimacy. This issue was of concern to Ursúa, who interrogated Ahau Can Ek' following his capture. The ruler responded that the message carried by Ah Chan had been approved by the lesser kings (reyezuelas) and that all his people knew about it (Jones 1998, 309-10). It is likely that Ursúa was shaping Ahau Can Ek's responses to suit his own purposes. However, the katun prophecies do not seem to have figured significantly in the opposition to Ahau Can Ek' and his policy of capitulation to the Spaniards in Yucatán. Avendaño recorded that after some discussion, the leaders of Ahau Can Ek's Maya enemies came to regard the katun prophecy argument as valid. Yet they were determined to engage in warfare (Jones 1998, 206-7). Thus, since even the most militant Itzá acknowledged the fate of Katun 8 Ahau, it does seem plausible that the defense would have collapsed quickly, as Barrera Vásquez and Morley stated.

- 15. This same discussion draws comparisons with offerings to the directions that are described in a seventeenth-century source. The account does not explicitly mention that the offerings were made at the corners of the altar, although they may well have been.
- 16. By overthrowing the Cocom rulers of Mayapán, the Xiu had helped create the environment of discord and mistrust (see note 11).
- 17. According to Barrera Marín, Barrera Vázquez, and López Franco (1976, 190), the *ya*' is the *Manilkara zapota*.
- 18. Barrera Vázquez (1939, 73) suggested in passing some years ago that the heads of the Ahau lords shown in López de Cogolludo's *Historia* may represent deified ancestors. The lack of uniformity in the level of documentation that has survived throughout the peninsula means that it cannot be proved definitively in the case of the Xiu of Maní, but Barrera Vázquez's interpretation at least seems plausible because the custom was practiced by the Cocom. Landa's *Relación* mentions the preservation of the skulls of high-ranking leaders, with replacement of the flesh by modeled facial features (Tozzer 1941, 130–31). The resulting sculptural portraits were kept in the temples with the idols and offered food during community celebrations.
- 19. In 1975 Thompson (1999, 238–39) participated in a ritual that re-created the pattern of the world directions. Held at San Antonio Sa' Itzab (in the pueblo of Mama), it is

- known as the *hedz luum* (literally "to settle, to found a town"). The observance included processions that moved from the center of the space to the four corners and back to the center in a counterclockwise succession. A bundle containing counted grains of corn, leaves, beans, candles, and other objects was buried at each of the five destinations. Nevertheless, Thompson (1999, 425111) was hesitant to attribute the creation of this pattern to awareness of its calendrical significance on the part of the leader of the event.
- 20. There are two direct statements in the *Maní* prophecy cycle that relate katuns to particular directions. The first of these mentions "the first Katun, to the east, is the Katun 11 Ahau" (Craine and Reindorp 1979, 77), and the second links Katun 8 Ahau with south (Craine and Reindorp 1979, 83). The number of prophecies between these positions is inconsistent with an orderly counterclockwise rotation around the cosmic periphery.
- 21. This is about at the place where the last prophecy, for Katun 13 Ahau, begins.
- 22. There appears to have been some ambivalence in the conception because the last Ahau head may be shown in the center. It has a cross, typically used to signal the beginning of the rotation, on its forehead. The copyist apparently did not fully understand the meaning of the regular katun wheel, or he adapted it to a different purpose. A gloss that appears to be written in the same ink explains the diagram as a fragment of a katun. Additionally, the numbers under the Ahau heads follow a regular sequential order, not the pattern of the katun rotation mentioned earlier (11, 9, 7, 5, 3, 1, 12, 10, 8, 6, 4, 2, and 13).
- 23. The wheel is not included in the photographic reproduction of the *Chilam Balam of Ixil* published by Caso Barrera (2011).
- 24. Thompson (1972, 90) noted that the association of directions and trees shown in the bottom panels of the four *Dresden Codex* pages seems to be out of order, and he suggested a reconstruction that would produce the standard counterclockwise rotation. Moreover, although the glyphs of the four perimeter directions are clearly recorded, the colors of the tree symbols do not follow the normal pattern. The color of the *Dresden* 25c tree is labeled as red in the text above, but the remaining three are shown as green.
- 25. According to Corominas (1954, 626), the general definition of palo is a piece of wood having greater length than thickness. Additionally, in America, the meaning of tree wood, hence tree, is well established. Santamaría (1978, 788–92), gives tree as the general meaning and provides numerous examples of tree names that include the word.

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Appendix

A COMPARISON OF THE LÓPEZ DE COGOLLUDO KATUN WHEEL WITH THREE BOOKS OF CHILAM BALAM



The explanation of the image of the tree surrounded by the portraits of thirteen Maya leaders as a katun wheel was initially developed by William Gates (1932). Before his views appeared in print, he told Sylvanus Morley about the similarities he had seen between the katun wheel illustrated by López de Cogolludo and information on katuns in the Book of Chilam Balam of Kaua and the Book of Chilam Balam of Chumayel. Morley (1920, 482–83) in turn recognized that the Book of Chilam Balam of Maní was also related. However, he was not sure whether the Kaua and Maní series were copied from López de Cogolludo or vice versa, or whether all three versions were copied from the same original. In an effort to learn more about how they might be linked, I have made an independent comparison of these sources.

The names of the martyred Ahau lords in the López de Cogolludo illustration appear beneath the heads associated with katun prophecies in the Maní manuscript, where the katun number would usually be registered, and they are mentioned in the texts of the Kaua cycle. The prophecies in both books are preceded by a formulaic statement of the place where the katun was seated that often includes the name of its face, or countenance. This information and brief phrases of some prophecies can also be seen in the Chumayel katun wheel. A few names from the Cogolludo list are sporadically mixed with Chumayel katun prophecies, but these Ahau lords and their surrounding history were apparently not of major interest to the compilers of the source in its surviving form.1 Nevertheless, three statements indicate that the Chumayel katun wheel or another prototype provided information for the *Maní* prophecies that cannot be explained as contributions that the latter shared with the *Book of Chilam Balam of Kaua*. The *Kaua* cycle does not mention the beginning of Christianity in Katun 11 Ahau, and it gives different locations for the places where Katuns 12 Ahau and 6 Ahau were established.²

The devices that frame the names written beneath the portrait heads in the Maní katun cycle probably show influence from the banners in the López de Cogolludo image. While the outlines of the forms were not copied precisely, their undulating quality was translated, and Europeanized shading was employed. These aspects are particularly apparent in the representation of Tucuch (Craine and Raindorp 1979, 83). That the 1688 illustration might have been used as a model is plausible on account of the statement at the end of the cycle: "When one series of 13 Ahau katuns ends, ... another series runs ... when this 8 Ahau ends another Ahau begins" (Craine and Raindorp 1979, 88). This suggests that the record was made during a Katun 8 Ahau that referred to the period from 1697 to 1717 (Sharer 2006, 783), not one that fell approximately 260 years earlier or later. Thus the publication of the Historia probably predates the Maní manuscript, or at least this portion of it.

The previous *Maní* quotation also includes the statement that "the effigies of the Ahau katuns are painted on the wheel of the katuns" (Craine and Raindorp 1979, 88), from which it may be inferred that the writer was familiar with such devices, perhaps because he had seen the original painting copied for López de Cogolludo's *Historia*. Only two direct statements in the *Maní*

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prophecy cycle relate katuns to specific directions, but this nevertheless shows continued interest in the topic. The connection of the introductory phrasing with the *Chumayel* katun wheel indicates that the same directional structure might also have been presumed.

NOTES

1. The lords who figure in the Chumayel prophecies are Napot Xiu, Yiban Can, Nauat, Tucuch, and possibly Ah Kin Chi, written as Kinchil Coba. Napot Xiu is mentioned in connection with the death of the rain-bringer in Katuns 13 Ahau and 11 Ahau, evidently in reference to the attempted Xiu crossing to make the sacrifice at the Sacred Cenote at Chichén Itzá (Roys [1933] 1967, 138, also see Roys's note 3). Yiban Can (written Iban) and Tucuch are year-bearers presiding to the west during a Katun 11 Ahau (Roys [1933] 1967, 65, also see Roys's note 5), and the account of the rise of Hunac Ceel states that Nauat was the guardian of the south gate (Roys [1933] 1967, 69). A Katun 13 Ahau prophecy states that it was established at

- Kinchil Coba and that Itzamna, Itzam-tzab, is its face (Roys [1933] 1967, 134). The *Kaua* Katun 13 Ahau prophecy records that "Ah Kin Chi Coba is his name . . . Kinchil Coba is the seat of the katun in 13 Ahau . . . Itzam Na and Itzam Tzab are its face during its reign" (Bricker and Miram 2002, 313).
- 2. Comparison of the Maní and Kaua cycles shows some resemblances, but these do not indicate collaboration or a common source. The greatest similarities occur at the beginning of each prophecy, where the information found in the Chumayel katun wheel and the López de Cogolludo image appears. There is consistency in whether the European year when the katun will end is given, and the uncorrected dates are typically the same and are based on a twenty-four-year duration for the interval. The remainders of the prophecies typically diverge, although there is some overlap of topics. For example, both Katun 12 Ahau texts metaphorically refer to the Spaniards as foxes but are in opposition concerning whether they are a problematic force (see Craine and Reindorp 1979, 83n72; and Bricker and Miram 2002, 309n1793). The Maní has introductory and concluding statements while the Kaua lacks these.

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